Check for updates

RESEARCH ARTICLE

Towards 'retroliberalism' or food security?: Donor development aid to the agricultural sectors of four Melanesian states, 2008-2021

[version 1; peer review: 3 approved with reservations]

Charles Hawksley[1], Jonas Brouillon[2], Nichole Georgeou[3], Severine Blaise[4], Nidhi Wali[3], Severine Bouard[2,3]

[1]Politics and International Studies, University of Wollongong, Wollongong, New South Wales, Australia
[2]Institut Agronomique Neo-Caledonien, Kone, New Caledonia
[3]Humanitarian and Development Research Initiative (HADRI), Western Sydney University, South Penrith, New South Wales, 2747, Australia
[4]Research Centre for Law and Economics (LARJE), Universite de la Nouvelle-Caledonie, Noumea, New Caledonia

v1 **First published:** 07 Nov 2024, **4**:243
https://doi.org/10.12688/openreseurope.17716.1
Latest published: 07 Nov 2024, **4**:243
https://doi.org/10.12688/openreseurope.17716.1

Abstract

Background

Development aid to Pacific Islands states tends to take the form of grants to provide services in health, education and transport, however Melanesian states are largely rural, and it may be time to consider stronger support for the agricultural sector as a mode of development to provide for future food security, decreased reliance on imports, and improved nutrition in an era of climate change adaptation.

Methods

To understand the place of family farming in the donor development strategies of four Melanesian states we first assess the place of foreign aid in total development finance to Papua New Guinea (PNG), Solomon Islands, Vanuatu and Fiji between 2008–2021. Using data from the Lowy Institute a detailed study of aid flows highlights the respective place of official development assistance (ODA), other financial flows, private flows and remittances in the financial flows for each recipient state. We then focus on donor aid flows and their sectoral breakdown concentrating on the 'Agriculture, Forestry and Fisheries' (AFF) sector, and within AFF on the sub-sectors of donor intervention.

Open Peer Review

Approval Status ? ? ?

	1	2	3
version 1 07 Nov 2024	? view	? view	? view

1. **Rusha Begna Wakweya**, Ethiopian Forestry Development, Jimma center, Jimma, Ethiopia
2. **TAUFIQ NAWAZ**, South Dakota State University, Brooking, USA
3. **Melodie Al Daccache**, ISDC - International Security and Development Center, Berlin, Germany

Any reports and responses or comments on the article can be found at the end of the article.

Results

We demonstrate the main areas of interest for each donor, paying particular attention to aid to agriculture, specifically who gives it, and why.

Conclusions

We conclude by noting that the orientation of agricultural aid to Melanesian states is outward and directed toward producing niche products for the global economy, and not inward or directed towards supporting the development of a stronger agricultural sector, nor the resilience of local population through food security. We thus argue that donor development aid to the agricultural sectors of these four Melanesian states is more reflective of 'retroliberalism' than of genuine concern for Pacific Islands food security.

Plain language summary

Pacific Islands states have numerous development challenges, and there is growing concern about food security. In this paper we examine donor development aid ('aid') to states in the area of Melanesia in the southwest pacific. We explore which countries and agencies give aid to Papua New Guinea, Vanuatu, Solomon Islands and Fiji. We use two main data sets—one from the OECD, one from the Lowy Institute in Australia— to see how much aid comes in, from whom, and what it is spent on. We then break down all aid by sector to focus on aid provided to the Agriculture, Forestry, Fisheries sector and look specifically at Agriculture. We find there is very little aid going to agriculture, and what there is links local farmers to the global market as it encourages niche production. We question this direction, arguing that an inward focus on supporting the development of stronger agricultural sectors would enhance food security and improve nutrition.

Keywords

Agriculture, Melanesia, Aid, Food Security, Nutrition.

This article is included in the Marie-Sklodowska-Curie Actions (MSCA) gateway.

This article is included in the Horizon 2020 gateway.



This article is included in the Family Farming, Lifestyle and Health in Small Islands, Countries and Territories collection.

Corresponding author: Charles Hawksley (charlesh@uow.edu.au)

Author roles: Hawksley C: Conceptualization, Formal Analysis, Methodology, Validation, Writing – Original Draft Preparation, Writing – Review & Editing; **Brouillon J**: Conceptualization, Data Curation, Investigation, Resources, Software, Validation, Visualization, Writing – Review & Editing; **Georgeou N**: Conceptualization, Formal Analysis, Investigation, Methodology, Writing – Original Draft Preparation, Writing – Review & Editing; **Blaise S**: Data Curation, Investigation, Validation, Writing – Review & Editing; **Wali N**: Investigation, Writing – Original Draft Preparation; **Bouard S**: Conceptualization, Data Curation, Funding Acquisition, Methodology, Project Administration, Resources, Validation, Writing – Original Draft Preparation, Writing – Review & Editing

Competing interests: No competing interests were disclosed.

Grant information: This project has received funding from the European Union's Horizon 2020 research and innovation programme under the Marie Skłodowska-Curie grant agreement No [873185].
The funders had no role in study design, data collection and analysis, decision to publish, or preparation of the manuscript.

Copyright: © 2024 Hawksley C *et al*. This is an open access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

How to cite this article: Hawksley C, Brouillon J, Georgeou N *et al.* **Towards 'retroliberalism' or food security?: Donor development aid to the agricultural sectors of four Melanesian states, 2008-2021 [version 1; peer review: 3 approved with reservations]** Open Research Europe 2024, **4**:243 https://doi.org/10.12688/openreseurope.17716.1

First published: 07 Nov 2024, **4**:243 https://doi.org/10.12688/openreseurope.17716.1

Introduction

The Oceania region contains 22 Pacific Islands Countries and Territories (PICTs) with diverse political arrangements from independent states to non-self-governing territories. The region in influenced by former and current colonial powers with a wide range of interests—USA, France, UK, Australia, New Zealand—as well as by rising powers seeking to expand their diplomatic and strategic influence (China), powers with both donor, commercial and historical interests (Japan), those seeking to maintain influence (Taiwan), and those seeking resources (China, Russia, and Republic of Korea (ROK)).

With the exception of Papua New Guinea (PNG), the PICTs all have populations under one million people, as well as small economies, limited employment, limited income, little disposable income, and high transport and labour costs that discourage both inter-island trade and even domestic markets. PICT economies are linked to the global economy through tourism and trade as well as various forms of rents—as highlighted by the MIgration; Remittances, Aid, Bureaucracy (MIRAB) model (Bertram & Watters, 1985), and the People considerations, Resource management, Overseas engagement, Finance, and Transportation) (PROFIT) models (Baldacchino, 2006)—but are often not fully integrated (Hawksley & Georgeou, 2023: 149).

Connections to the global economy can also result in vulnerabilities, as was the case during the COVID pandemic when shipping services were reduced across Oceania. The first six months of 2020, when the COVID pandemic was spreading across the globe and states were locking down, saw widespread declines in both imports and exports in the Pacific: Fiji's exports were down 20.5% and its imports 24.8%; Samoa's exports fell 18% and its imports 20.9%; Tonga's exports fell 28.3% and its imports 24.8% and Tuvalu's exports declined by a massive 71%, however its imports were unchanged (Hawksley & Georgeou, 2023: 145).

As Harlan Koff and Thomas Kolnberger (2023) argue, the lack of access by Pacific small island developing states to transnational economic networks acts as a constraint on sustainable economic development. Recently in Oceania, climate change has created tensions for food security as low-lying PICTs are generally reliant on coastal fisheries, and marine resources shape livelihoods, food cultures and economies (Georgeou *et al.*, 2024; Islam & Kieu, 2021: 102). Melanesian PICTs have more land area than Polynesian or Micronesian PICTs and are on the whole rural societies with high levels of food self-sufficiency. If agriculture is to form part of any long-term donor development planning for food security, it should be evident in an analysis of aid flows to the agricultural sector.

Melanesia in the southwest west of Oceania contains four independent states— Papua New Guinea (PNG), Solomon Islands, Vanuatu, and Fiji. New Caledonia, while part of France, has many autonomous powers, including with respect to foreign affairs in the Pacific region (Hawksley & Ward, 2019: 4), however it cannot be included in this analysis of aid as it is French territory, and by definition no state may give aid to itself.[1]

Independent Pacific states are sovereign and can make their own choices on all matters, including on development partnerships. While Australia and New Zealand have historically provided the majority of development aid, humanitarian support and military assistance to the independent and dependent states of Oceania, China's phenomenal growth since the 1980s has led to an increased assertiveness in its foreign policy, focussed on: (1) the removal of the last vestiges of international support for Taiwan as a state, and (2) an expansion of China's political influence globally, especially through trade, aid and the Belt and Road Initiative (BRI) (Smith & Wesley-Smith, 2021).

In the lead up to the 2007 Australian election, opposition politicians expressed concern that Australia's Pacific influence was waning due to neglect (Hawksley, 2009: 120–121). In 2019 Solomon Islands made the diplomatic switch from Taiwan to Beijing, which was a predicted consequence of the growing importance of its trade with China (Hawksley & Georgeou, 2019). By 2022 China was established as a significant (and in some cases the largest) trade partner for all Melanesian PICTs, as seen in Table 1, in particular for Solomon Islands exports.

Statistically the four Melanesian states are classified in the 2022 UN Human Development Index (UNHDI, 2022) as 'medium' (0.5-0.699)—PNG (0.568); Solomon Islands (0.562), Vanuatu (0.614)—while Fiji (0.729) is ranked as 'high' (0.7-0.799). As Table 2 shows, Fiji also has a more urbanised population than its Melanesian neighbours.

We now turn to international aid donors and their support for these four Melanesian PICTs analysing data from three main databases: the Lowy Institute's Pacific Aid Map database, the OECD and World Bank. We begin with an overview of development and financial flows in Oceania, before unpacking the situation of each country and the specific place of agriculture in donor strategies in terms of the amount of money and the sub-category of aid flows into which they have been classified by the World Bank.

Methods

Overview of development and financial flows in Oceania

General context. Historically Australia has been the largest aid donor to the Pacific, with New Zealand, Japan, the US,

[1] Given the provincial nature of agricultural and rural development expertise, an analysis could still have been undertaken. It would have been necessary to distinguish between European and national financial flows, a task made particularly difficult by the weakness of the local statistical systems and the complexity of the institutional organisation. Nevertheless, the fact remains that this state of unfinished decolonisation means that New Caledonia is not included in international aid flows, bilateral or otherwise. The comparison with the other four Melanesian PICTs would not have been valid.

Table 1. Five largest export and import partners for Melanesian states in 2016 and 2022 (% share).

		Fiji		Vanuatu		Papua New Guinea		Solomon Islands	
FlowDesc	Number	2016	2022	2016	2022	2016	2022	2016	2022
Export	1	China (19%)	Singapore (19%)	Australia (18%)	China (22%)	Australia (31%)	China (26%)	China (22%)	China (36%)
	2	New Zealand (16%)	China (19%)	China (17%)	Australia (15%)	China (16%)	Australia (24%)	Australia (20%)	Singapore (15%)
	3	Australia (15%)	Australia (13%)	Fiji (11%)	Malaysia (11%)	Singapore (9%)	Singapore (16%)	Malaysia (10%)	Malaysia (11%)
	4	Singapore (11%)	New Zealand (12%)	New Zealand (10%)	Singapore (11%)	Malaysia (8%)	Malaysia (9%)	Singapore (10%)	Australia (11%)
	5	Rep. of Korea (9%)	Rep. of Korea (10%)	Japan (9%)	New Zealand (8%)	Japan (4%)	Indonesia (4%)	Vietnam (6%)	New Zealand (4%)
Import	1	USA (36%)	USA (50%)	Congo (56%)	Thailand (43%)	Australia (30%)	Japan (27%)	China (61%)	China (53%)
	2	Australia (21%)	Australia (16%)	Mauritania (16%)	Japan (27%)	Japan (23%)	China (23%)	India (10%)	Italy (8%)
	3	New Zealand (7%)	New Zealand (7%)	Japan (11%)	Rep. of Korea (7%)	China (19%)	Australia (10%)	Italy (5%)	India (8%)
	4	Japan (5%)	China (6%)	Rep. of Korea (2%)	Philippines (6%)	Other Asia (5%)	Rep. of Korea (10%)	Malaysia (3%)	Australia (4%)
	5	United Kingdom (4%)	Japan (5%)	Thailand (2%)	China (5%)	Singapore (3%)	Other Asia, nes (9%)	Philippines (3%)	Netherlands (4%)

Source : This table is produced by data from the UN Comtrade Database (2024)[2] publicly available on UNDATA (2024).

Table 2. World development indicators for Melanesian countries (2020).

Indicator	Fiji	Vanuatu	Papua New Guinea	Solomon Islands
Population total	920,422.00	311,685.00	9,749,640.00	691,191.00
Population growth (annual %)	0.21	2.36	2.15	2.37
Population ages 15-64 (% of total population)	65.27	56.53	62.05	56.97
Life expectancy at birth total (years)	67.92	70.30	65.79	70.20
Fertility rate total (births per woman)	2.50	3.78	3.27	4.04
Rural population (% of total population)	42.75	74.48	86.66	75.33
GDP (constant 2015 US$) (millions)	4,329.28	817.56	23,936.89	1,437.36
GDP per capita (constant 2015 US$)	4,703.58	2,623.05	2,455.16	2,079.54

Source: Adapted from the Data World Bank website (https://data.worldbank.org/) for PNG, Fiji, Solomon Islands and Vanuatu (2020), data are publicly available.

[2] All tables in this article have been created by the authors from open access and publicly available free source data available from the Lowy Institute, UN Comtrade, and the World Bank. For each table we have acknowledged the original data source and provided a link in the references.

and the EU also contributing; however, in the past 15 years China's aid contribution to the Pacific has increased. Since the 1980s the major regional aid donor Australia has adopted policies that have sought to integrate Melanesian states more closely with the global market so as to boost Pacific agricultural exports, create wealth, and reduce poverty (Hawksley, 2009: 127). Australian politicians in particular have historically been dismissive of the Pacific region's concerns, and until recently also held a view that many Pacific governments were plagued by corruption (Hawksley & Georgeou, 2023: 146).

Concerns over growing Chinese influence prompted the Australian (Liberal-National) governments of Malcolm Turnbull (2015–2018) and Scott Morrison (2018–2022) to announce the Pacific 'Step up' as a 'step change' in engagement. From September 2016, the main initiatives were a $2bn Infrastructure financing facility, access to the Australian seasonal (fruit and vegetable) labour market for some Pasifika peoples, telecommunications infrastructure, and revitalized policing cooperation (DFAT, 2019a). Outsider notions of security in the Pacific are also changing—they are adapting from initial concerns over law and order that for decades influenced donor efforts towards creating centralised state control and stability (Georgeou & Hawksley, 2016), towards a human-security model that considers a range of factors, including gender-based violence, disability inclusion, food security, access to education and support for climate action. In terms of a 'diplomatic footprint', Australia is the best represented power in Oceania with extensive official Embassies and High Commissions across the Pacific, and Consulates General in New Caledonia and French Polynesia (DFAT, 2024b).

China has long term Pacific relationships with Fiji and Samoa (1975), PNG (1976), Vanuatu, 1982, and Micronesia (1989) (China Embassy NZ, 2023). It has since worked assiduously at prising states from the Taiwanese diplomatic orbit in the Pacific with recent 'flips' including Kiribati (2019), Solomon Islands (2019), and Nauru (2024) (Al Jazeera, 2024; Hawksley & Georgeou, 2019; MOFA PRC, 2021). Such switches form part of a much longer-term global diplomatic game involving Chinese attempts to extinguish recognition of Taiwan that date back well over two decades (Hawksley, 2009), and which have seen support for Taiwan's separate existence as a state eroded in Africa, the Pacific and in the Caribbean. In the Pacific, China now claims recognition by 10 states, and has embassies in eight (China Embassy NZ, 2023).

China's expanding links with Oceania have been and remain of great concern to Australia and the Western Alliance but are arguably a problem of their own making. Australia and New Zealand both imposed supposedly 'smart sanctions' on Fiji in 2007 in an attempt to convince the Fijian military regime to return power to its democratically elected government. These sanctions backfired in a spectacular manner, and the main beneficiary was China, which strengthened its economic and political relations with Fiji (O'Keefe, 2021). By 2018, Australian media was reporting that China was seeking to establish a military base in Vanuatu, which is a member of the non-aligned movement (O'Keefe, 2020), and while those reports were false, in 2007 China did build a new headquarters for the sub-regional Melanesian Spearhead Group (MSG) in Port Vila, Vanuatu (Hegarty, 2015).

While Oceania is marginal in terms of its percentage of global population, or its economic activity, the geostrategic importance of the Pacific Ocean region is bound up with the Western strategic denial of the Pacific to China; effectively Australia, New Zealand, France and the US are attempting to keep China out or reduce its influence over the PICTs (Hawksley & Georgeou, 2023: 147).

In 2015 China's aid spending (US$233.9 million) exceeded that of New Zealand (US$204) for the first time (Hawksley & Georgeou, 2023: 148), however, Chinese spending in the Pacific has also been declining since 2019 (Pryke & Dayant, 2021), a decline that could be linked to the Chinese state's efforts to cut spending and restructure debt (Deng, 2022). It is also likely due to the PICTs' concerns over debt trap development loans (Smith, 2021). In addition to grants and loans China also deploys considerable Foreign Direct Investment (FDI), and State-Owned Enterprise (SOE) to expand its geopolitics influence (Stone *et al.*, 2022)

Increased Chinese engagement in the Pacific has presented an opportunity for some Pacific states to use their sovereignty to leverage influence (Hawksley & Georgeou, 2023) and has caused diplomatic panic in Australia (Varrall, 2021). Between 2003–2017 Australia spent over AUD$2.8bn leading the Regional Assistance Mission to Solomon Islands (RAMSI) (SBS News, 2017), but in March 2022, Australia's Morrison government was caught unaware and was diplomatically embarrassed when Solomon Islands and China drafted the Inter-governmental Framework Agreement on Security Cooperation', an agreement that allowed for widespread Chinese security support (VIF Brief, 2022: 5).

> Solomon Islands may, according to its own needs, request China to send police, armed police, military personnel and other law enforcement and armed forces to Solomon Islands to assist in maintaining social order, protecting people's lives and property, providing humanitarian assistance, carrying out disaster response or provide assistance on other tasks agreed upon by the Parties; China may, according to its own needs and with the consent of Solomon Islands, make ship visits to, carry out logistical replenishment in, and have stopover and transition in Solomon Islands, and the relevant forces of China can be used to protect the safety of Chinese personnel and major projects in Solomon Islands.

China sending its police, troops, and naval vessels to Solomon Islands is part of an attempt by Solomon Islands to expand its traditional donor development relationships (Sora, 2022) and to embrace the more infrastructure-based grants offered by Chinese State-owned enterprises. Such moves have prompted limited US re-engagement in the Pacific; for example

in February 2023 the USA re-opened its embassy in the capital, Honiara, which it had closed in 1993 (Hawksley, 2023).

The other important Asian donor to the Pacific, Japan, emerged as the world's largest aid donor in absolute terms in 1989 (Donortracker.org, 2024). In the Pacific, Japanese aid has undergone gradual changes since it commenced as war reparations to neighbouring countries. Heavily criticised both internationally and domestically over the mercantile nature of its initial aid policy, and for the severe environmental damage of many of its assistance projects, Japan responded with the adoption of its Overseas Development Aid (ODA) Charter in 1992. The Charter sets out a standard list of goals that must be met by Japanese aid programs, such as social welfare, democratisation and scrutiny of military expenditures. Additional to ODA expenditures, Japan's contributions and subscriptions to Multilateral Grants come in the form of its support for the Asian Development Bank (ADB), an organisation in which it plays a leading role and in which it advances much of the capital or loans.

The top donors to the four Melanesian PICTs chosen for this aid analysis are Australia, New Zealand, China, and Japan, which has recently significantly increased its assistance in the region, along with multilateral organisations such as the World Bank, the Asian Development Bank and European Union institutions (See Figure 1)

These official financial flows, in the form of overseas development assistance (ODA) subsidies and loans, need to be set against other official flows (OOF) and remittances, which are very important in Fiji (Jayaraman *et al.*, 2011) and in Vanuatu because of an increase of seasonal workers to Australia (See Table 3). Personal remittances represented 21% of Vanuatu GDP in 2021 (World Bank). An examination of the development finance in the four Melanesian PICTs during the 2008–2021 (Table 3) period per flow type (in Millions Constant USD) reveals a strong role for remittances in Fiji and Vanuatu, and a central role for grant aid in PNG, Solomons and Vanuatu.

As Table 4 shows, the nature of financial flows in Melanesian PICTs differs from donor to donor.

We may thus see which type of ODA activities donor states favour. As noted above, the importance of loans within Chinese aid has heightened mistrust in the region about a possible debt trap trajectory (Hawksley & Georgeou, 2023:146; Rajah *et al.*, 2019). However, it is worth noting that the recently completed 2023 Pacific Games in Honiara Solomon Islands relied heavily on ODA Grants for new venues, mostly from China, but also from Japan (Hawksley, 2023).

New Zealand (100%), the EU (98%) and Australia (91%) utilise grants in their ODA, while different forms of loans account for 100% of the IFC, 90% of World Bank lending, and 96% of ADB aid. China is 80% loans and 20% grants, and Japan 56% grants and 44% loans. This is in line with the influence struggle on infrastructure development (Katada & Liao, 2020; Knoerich & Urdinez, 2019) and the traditional use of aid provided by Japan or China throughout the world these last years (Ky *et al.*, 2012).

Additionally, not all Melanesian PICTs are equally dependent on foreign aid, with loans accounting for a significant,

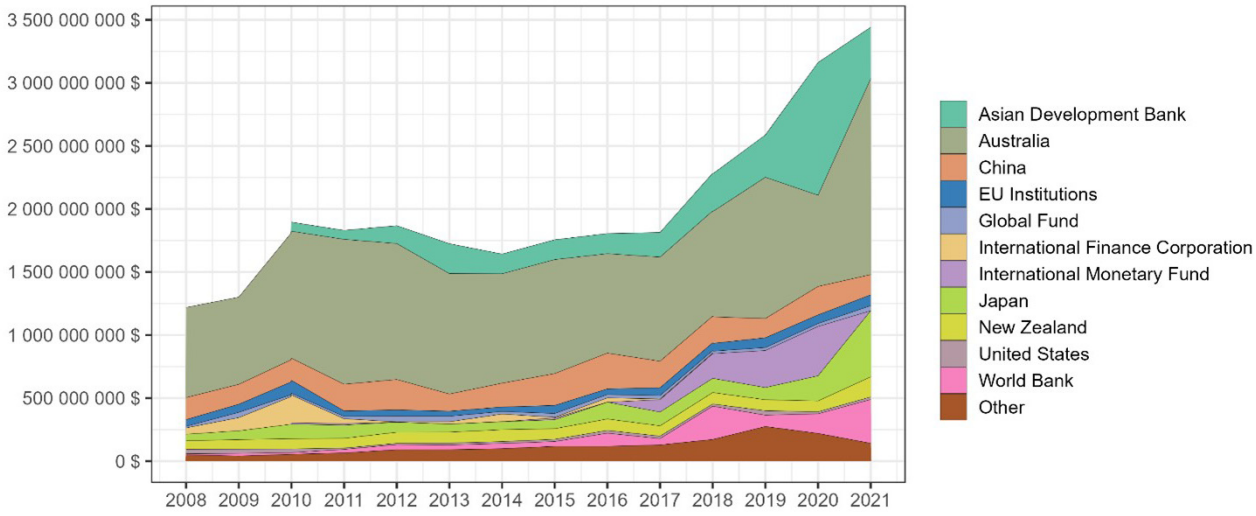

Figure 1. Total aid amount by donor to the Pacific from 2008–2020 *(USD, 2021 constant prices).* Source: Adapted from the Lowy Institute Pacific Aid Map database (2024), data are publicly available.[3]

[3] All data from the Lowy Institute's Pacific Aid Map are filtered to "spent funds" and exclude "commitments fund", as according to Lowy Institute "Large commitments, typically in infrastructure, can often take a long time to disburse, meaning commitments can often overstate a donor's overall footprint. Spent funds are a better indication of annual flows into the region."

Table 3. Sum of development finance in Melanesian countries during the 2008–2021 period per flow type (Millions USD, 2021 constant prices).

Flow type	Fiji	Vanuatu	Papua New Guinea	Solomon Islands	Total
ODA - Grant	2,026 (29.7%)	1,954 (55.7%)	9,175 (54.4%)	4,239 (80.0%)	17,394 (53.5%)
ODA - Loan	630 (9.2%)	441 (12.6%)	3,166 (18.8%)	129 (2.4%)	4,366 (13.4%)
OOF - Grant	49 (0.7%)	44 (1.3%)	430 (2.5%)	495 (9.3%)	1,018 (3.1%)
OOF - Loan	741 (10.9%)	16 (0.5%)	3,951 (23.4%)	144 (2.7%)	4,852 (14.9%)
OOF - Other	6 (0.1%)	3 (0.1%)	31 (0.2%)		40 (0.1%)
Persol remittances	3,360 (49.3%)	1,053 (30.0%)	125 (0.7%)	290 (5.5%)	4,828 (14.9%)
Total	6,812 (100.0%)	3,511 (100.0%)	16,878 (100.0%)	5,297 (100.0%)	32,498 (100.0%)

Source: Adapted from data from Lowy Institute Pacific *Aid Map* (2024) and World Bank (2024), period 2008 to 2021, data are publicly available.

Table 4. Donor by loan or grant type, including overseas development assistance (ODA) as subsidies (grants) or loans, and other official flows (OOF) as loans or grants. *(Millions USD, 2021 constant prices)*.

Donor	ODA - Grant	ODA - Loan	OOF - Loan	OOF - Other	OOF - Grant	Total
Asian Development Bank	199 (6%)	691 (21%)	2,387 (73%)	11 (0%)		3,288 (100%)
Australia	11,238 (86%)		888 (7%)		1,016 (8%)	13,142 (100%)
China	564 (20%)	1,467 (53%)	752 (27%)		1 (0%)	2,784 (100%)
EU Institutions	816 (96%)	38 (4%)				854 (100%)
Japan	1,008 (56%)	785 (44%)				1,793 (100%)
New Zealand	1,249 (100%)					1,249 (100%)
Other	2,180 (66%)	448 (13%)	662 (20%)	29 (1%)		3,319 (100%)
World Bank	139 (11%)	937 (76%)	162 (13%)			1,238 (100%)
Total	17,393 (63%)	4,366 (16%)	4,851 (18%)	40 (0%)	1,017 (4%)	27,667 (100%)

Source: Adapted from data from Lowy Institute Pacific Aid Map (2024), data are publicly available.

and in some cases a majority, share of development aid from multilateral organisations, as well as from China.

Figure 2 charts development finance in $US to the four Melanesian states during the 2008–2021 period by flow type and donor (as % of each donor) and reveals the four PICTs have very different aid donor dynamics. Figure 3 presents these amounts as a percentage of GDP and shows that aid to PNG is 6–8% GDP. For Solomon Islands and Fiji aid is 20% of GDP, and in Vanuatu as much as 35–40% GDP.

Finally, as can be seen in Table 5 below, Australia 'outspends' any other state in aid dollars to these PICTs by a factor of four over China, almost nine over Japan and ten over New Zealand. In 2023/24 the Australian aid budget was estimated to be AUD $4.77 bn, out of which the Pacific region would receive $1.433 bn (22%), Southeast Asia $775.4 million, South and West Asia $124.1 million, and the Middle East and Africa $35 million, and East Asia $11.5 million Australian support for cross-cutting regional and global programs on *inter alia*, gender, climate, resilience, and disability, were funded with $1.874bn million in 2023/24. Most Australian aid is delivered by DFAT, however there are nine other Australian government entities in the aid delivery business expending a total of $349.9 million, the largest of which is the Australian Centre for International Agricultural Research (ACIAR) which in 2023/2024 delivered $104 million in aid alone, and another $4.1 million in partnership with DFAT (DFAT, 2023)

We can see from the above that some donors share their aid around more evenly than others, while other donors are mostly interested in programs in one Melanesian state. Notably more than half the aid from ADB, Australia, China, EU Institutions, Japan and the Word Bank goes to PNG. New Zealand has

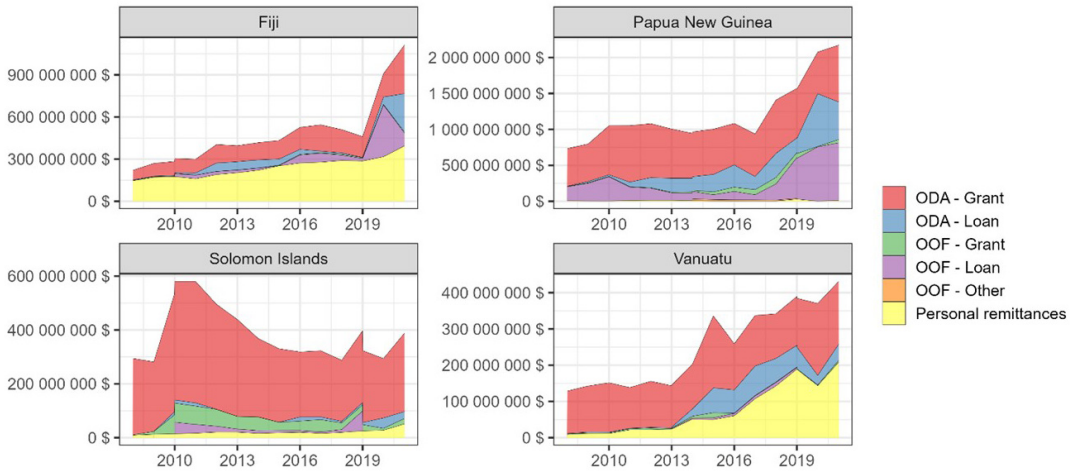

Figure 2. Four Melanesian states by type of aid received between 2008 and 2021 (USD, 2021 constant prices). Source: Adapted from Lowy Institute Pacific Aid Map Data (2024) and World Bank (2024) for Personal remittances, from 2008 till 2021, data are publicly available.

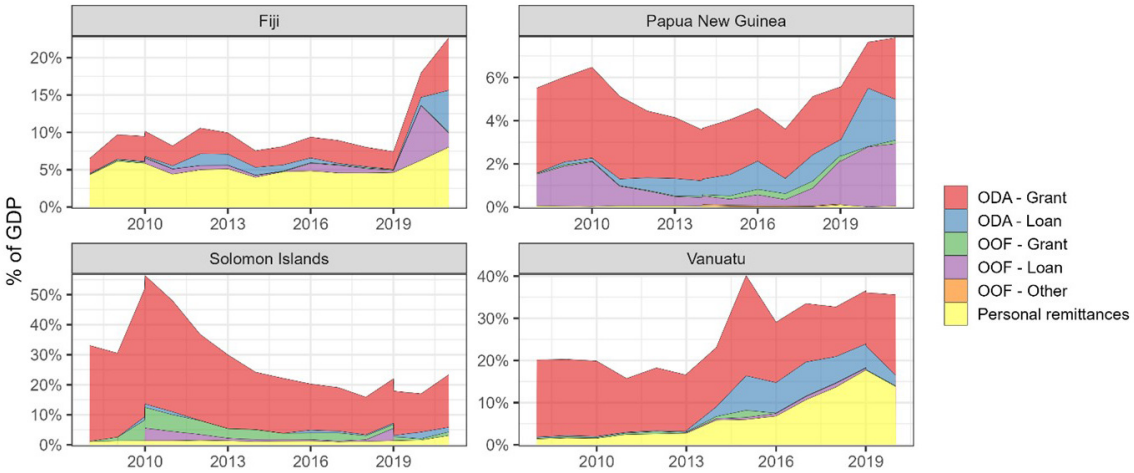

Figure 3. Four Melanesian states by type of aid received in % of GDP (2008–2021). Source: Adapted from data from Lowy Institute Pacific Aid Map Data (2024), World Bank (2024) for Personal remittances, South Pacific Community (2024) for GDP[4] from 2008 till 2021, data are publicly available.

the most balanced and equitable aid strategy, with a slight preference for Solomon Islands during the period concerned (2008–2021). We now focus on the individual Melanesian states and unpack the structure of their aid support and identify the levels of funding devoted to agriculture.

Papua New Guinea. The largest and most populous of the Pacific Islands States, PNG has extensive minerals, oil and gas, and both Australia and China wish to gain access to its mines and commodities. These two states are using aid to secure the trade in commodities; however, PNG's economy is five times as large as the next largest PICT (Fiji). As Figure 4 shows this gives PNG an advantage in attracting and securing funding for development projects from a range of development partners, including the World Bank and the Asian Development Bank, and Japan.

Papua New Guinea currently receives about 40% of total Australian aid to the Pacific region. The historical Australian aid focus in PNG has been around health and education, much of it delivered through churches (Georgeou, 2012: 93; Hawksley, 2008: 146–147). There are now three foci of the

[4] GDP data from SPC are in USD 2015 constant, so data were deflated to fit with the 2021 constant USD data from Lowy Institute.

Table 5. Development finance in Melanesian countries during the 2008–2021 period per recipient and donor (in Millions USD, 2021 constant prices).

Donor	Fiji	Vanuatu	Papua New Guinea	Solomon Islands	Total
Asian Development Bank	544 (17%)	75 (2%)	2,506 (76%)	163 (5%)	3,288 (100%)
Australia	863 (7%)	911 (7%)	8,095 (62%)	3,274 (25%)	13,143 (100%)
China	421 (15%)	364 (13%)	1,935 (69%)	65 (2%)	2,785 (100%)
EU Institutions	198 (23%)	84 (10%)	436 (51%)	136 (16%)	854 (100%)
Japan	361 (20%)	222 (12%)	931 (52%)	280 (16%)	1,794 (100%)
New Zealand	218 (17%)	291 (23%)	359 (29%)	380 (30%)	1,248 (100%)
Other	507 (15%)	378 (11%)	1,858 (56%)	577 (17%)	3,320 (100%)
World Bank	340 (27%)	132 (11%)	634 (51%)	132 (11%)	1,238 (100%)
Total	3,452 (12%)	2,457 (9%)	16,754 (61%)	5,007 (18%)	27,670 (100%)

Source: Adapted from data from Lowy Institute Pacific Aid Map database (2024), data are publicly available.

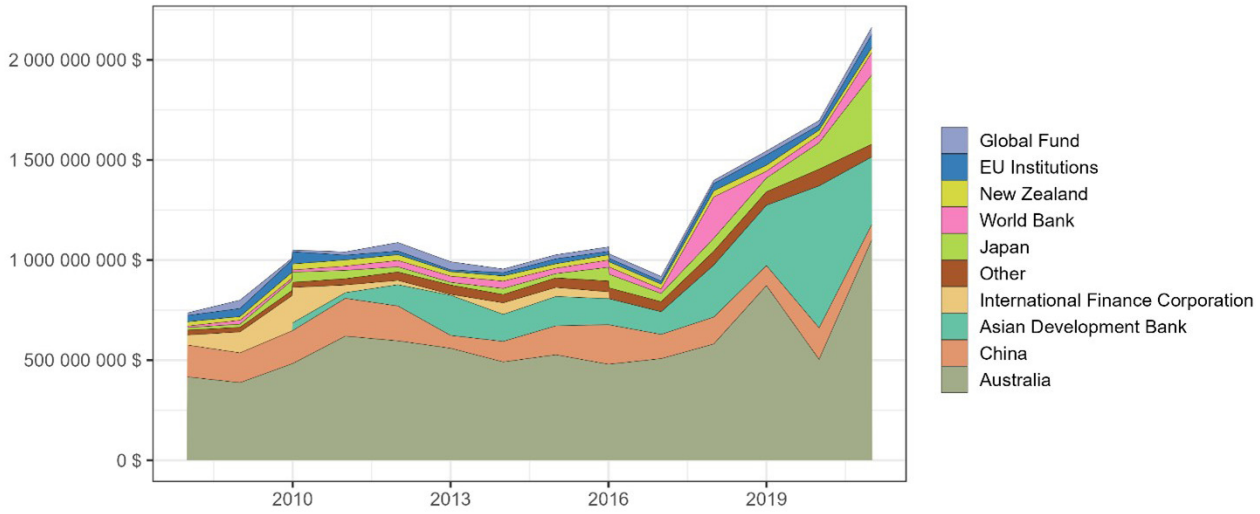

Figure 4. Evolution of ODA and OOF received by Papua New Guinea per donor between 2008 and 2021 (USD 2021 constant prices). Source: Adapted from data from Lowy Institute Pacific Aid Map database (2024), data are publicly available.

Australia-PNG relationship: "health security; stability; and economic recovery". The last of these has meant a return to budgetary support since 2019 (DFAT, 2024a). In addition, a total of $1.2bn has gone to support PNG government spending through the $4bn Australian Infrastructure Financing Facility for the Pacific (AIFFP) which partners "with governments and private sector in the Pacific and Timor-Leste, to provide grant and loan financing for high quality, transformational energy, water, transport, telecommunications and other infrastructure" (AIFFP, 2024).

Apart from donor states Australia, China, Japan and New Zealand, institutional donors to PNG include the World Bank and the ADB, the latter providing the second largest amount of development funding by 2020. In 2022 the World Bank approved projects to the value of US$229 million for road repair and maintenance, worker employment services for those looking to access labour markets in Australia and New Zealand, and nutrition-focused health services (See Figure 5) to end stunting in children (World Bank PNG, 2024b). The ADB has lent on average $332 million per year for the five years 2017–2021, and in its total history with PNG through 292 projects, some $4.26bn, over half of which was spent in the transport sector (ADB PNG, 2024).

Japan and PNG have an aid relationship that commenced in 1974 and has been defined at various points by the collection

of the bones of Japan's war World War II dead, existing fisheries and Liquified Natural Gas (Japan PNG, 2012). Japan's ODA to PNG is mostly allocated to transports projects, such as the Nadzab Airport Redevelopment Project, or the Ramu Transmission System Reinforcement Project (MOFA, 2016). During the COVID-19 Pandemic, Japan also provided emergency support to the four Melanesian countries in this study (MOFA, 2022).

As Figure 6 below shows, Australia's largest contribution is to the "Government and Civil Society" sector ($2.5 billion between 2008 and 2021), which is divided between multiple governmental cooperation programs with Australia in the fields of policing and justice (DFAT, 2019c). This is in keeping with Australia's traditional use of development aid over the past few decades, seeing it as a means of ensuring stability in the region through the implementation of "good governance" (Carroll & Hameiri, 2007).

The second most funded sector in PNG is the "Transport" sector, and the ADB is the main donor to this sector, notably with the upgrade of five national airports in the "Civil Aviation Development Investment Project" (IEG, 2019). The ADB also funds road and bridges, construction, or infrastructure for the port of Lae (ADB, 2017). Australia funds a program to support PNG transport infrastructure, including the Junction-Yamagi Road Project-designed to increase access to the Ramu Nickel-Cobalt site (Tetra Tech, 2022). These projects are monitored by Chinese SOE which hold most of the development contracts, even with the ADB infrastructure projects (Connolly, 2020).

The third most funded sector is the "Health" sector, mainly composed of cooperation programs funded by Australia (DFAT, 2012) or the ADB ADB/PNG, 2020), including the Covid 19 responses programs (ADB, 2022). The fourth most funded sector is the "Industry, Mining and Construction", mainly funded by China ($656 Millions USD during the 2008–2021 period), and mostly concerning the Ramu Nickel-Cobalt Road from 2008 to 2013 and monitored by Metallurgical Corporation of China Limited (MCC) since a 2005 agreement with PNG (AIDDATA (2021a) (Figure 6). This trend provides a significant illustration of China's strategy to secure access to mining commodities and critical metal ores (Fortier *et al.*, 2019). Support for the Agricultural Forestry and Fisheries sector ranks 8th of 11 named sectors.

Solomon Islands. Between 2003–2017 most of the aid to Solomon Islands was funnelled through the Regional Assistance Mission to Solomon Islands (RAMSI), specifically the cost of maintaining the police personnel of the Participating Police Force (PPF), and in training Royal Solomon Islands Police Force (RSIPF) police cadets, and constructing RSIPF police buildings, including a new HQ at Rove near Honiara, and a program of renovation of police stations (Hawksley & Georgeou, 2016). As Figure 7 and Figure 8 below show, more than 60% of Australian Aid in the "Government and Civil Society" sector currently was dedicated to the RAMSI Program, while other projects concerned the "Governance and stability" sector.

From around 2000–2010 aid donor coordination in Solomon Islands operated through the unofficial "Honiara Club" of donors from Australia, New Zealand, UK (EU), Japan, Republic of Korea (ROK) & Taiwan (ROC). Donor coordination involved different embassies and monthly meetings of donors including Japan (Japan International Cooperation Agency - JICA), NZ Aid (through NZ High Commission), AusAid (Australian High Commission), World Bank, International Finance Corporation (IFC), Asian Development Bank (ABD), Republic of Korea, ROC (Taiwan), South Pacific Commission (now Pacific

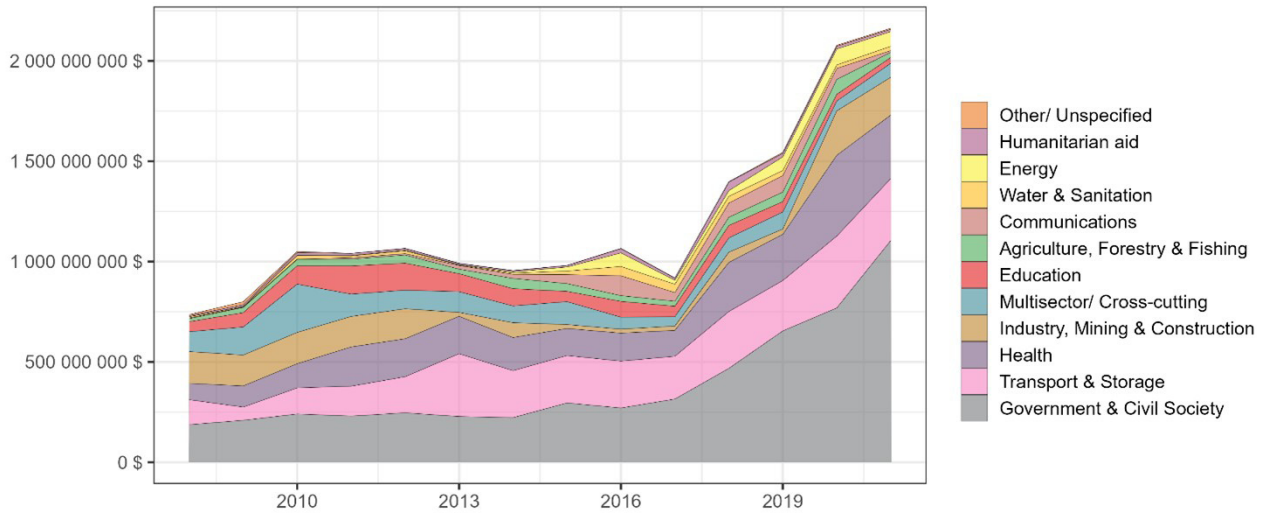

Figure 5. Evolution of ODA and OOF received by Papua New Guinea per sector between 2008 and 2021 (USD, 2021 constant prices). Source: Adapted from data from Lowy Institute Pacific Aid Map database (2024), data are publicly available.

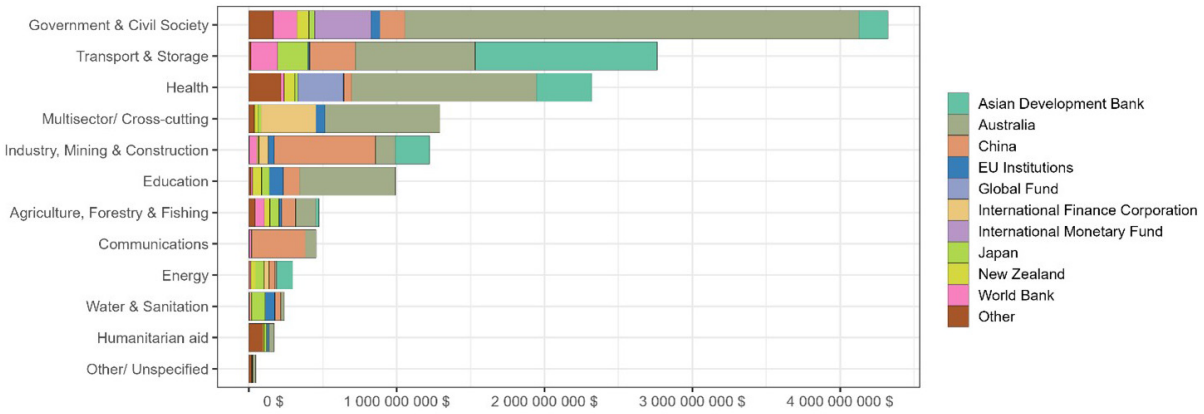

Figure 6. Total ODA and OOF received by Papua New Guinea per sector and donor between 2008 and 2021. (USD, 2021 constant prices). *Source:* Adapted from data from *Lowy Institute Pacific Aid Map database (2024)*, data are publicly available.

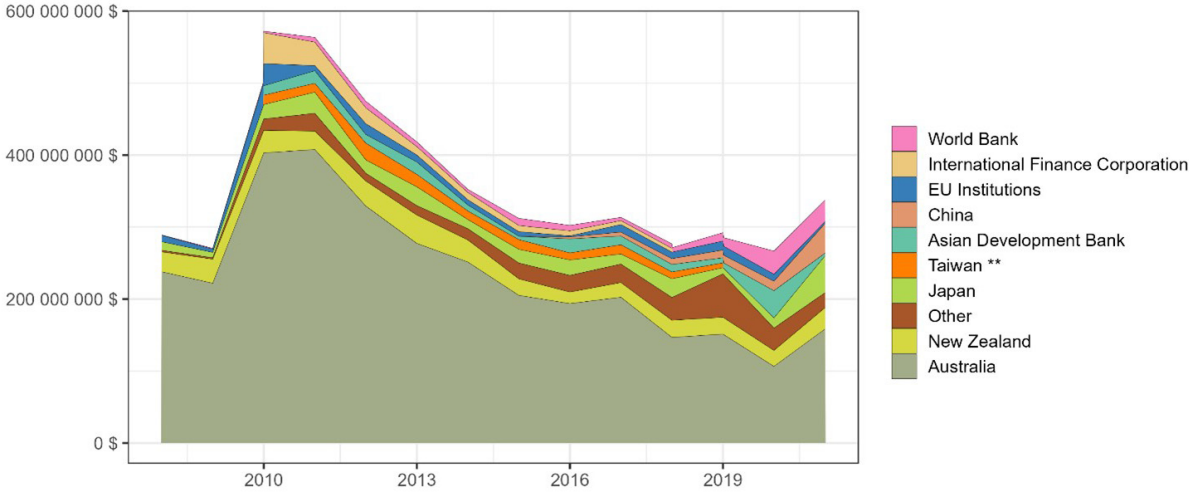

Figure 7. Evolution of ODA and OOF received by Solomon Islands per aid donor between 2008 and 2021 (USD, 2021 constant prices). Source: Adapted from data from Lowy Institute Pacific Aid Map database (2024), data are publicly available.

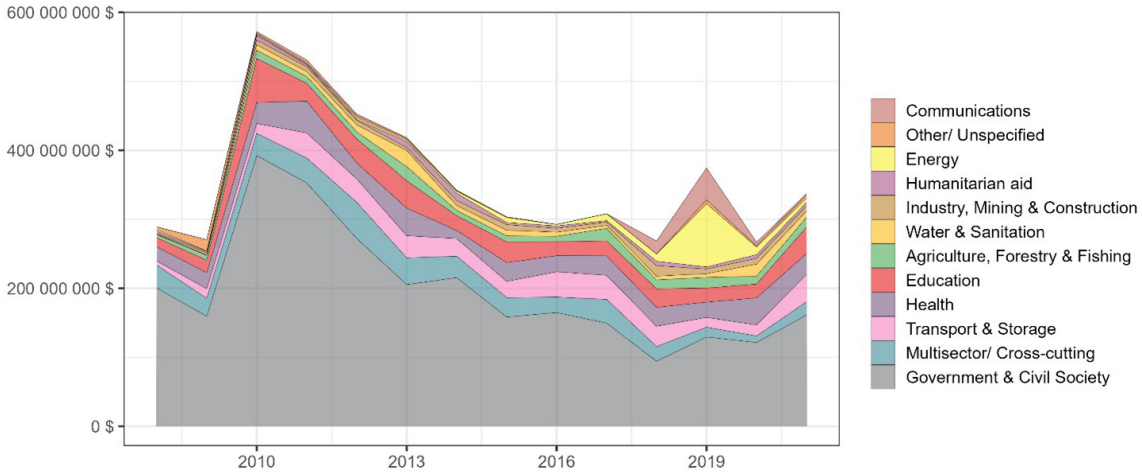

Figure 8. Evolution of ODA and OOF received by Solomon Islands per sector between 2008 and 2021 (USD, 2021 constant prices). Source: Adapted from data from Lowy Institute Pacific Aid Map database (2024), data are publicly available.

Community), and the Commonwealth (the UK). The purpose of the Honiara Club was to avoid aid project duplication through information sharing. This enabled Australia and NZ to work on health, education and security issues, while the other main donor (Japan) worked on infrastructure projects (Kemakeza, 2012).

Following the conclusion of RAMSI Australia and New Zealand maintain security and bilateral policing support missions with the RSIPF, recently joined by China. Other Australian and New Zealand aid projects in Solomon Islands tend to focus on education and health.

Past Japanese projects have included a jetty and a covered open-air market in Auki (Malaita) ($80 million between 2007–2012); the construction of bridges to the west of Honiara after flooding; Honiara city's water supply at Panatina (2009–2014), and a hospital in the Western Province capital of Gizo (2008–2011) in response to the 2005 Tsunami. The Gizo hospital is one of two major hospitals in the entire country (JICA, 2012).

Lowy Institute figures for 2020 show Australian aid ($95.3m) is much larger than that of New Zealand ($21.26m) and the World Bank ($14.5m). Since the diplomatic relationship with China was formalised and that with Taiwan[5] ended in 2019, a range of aid projects have been undertaken. China built new infrastructure for Solomon Islands for the November 2023 Pacific Games, with the showcase being a 10,000-seat open air athletics stadium. Japan contributed a new international airport terminal and major connecting roads into Honiara for the same event (Hawksley, 2023).

After the establishment of diplomatic relations, Beijing has promised Honiara around US$730 million in financial aid funding "for health, agriculture, sport, and climate change adaptation and mitigation" (CFE-DM, 2023: 84). If this figure is correct, it helps explain the new-found enthusiasm in Honiara for a comprehensive security partnership with China, which was signed in March 2022 (Hawksley & Georgeou, 2023: 147), and subsequent Western (Australian and US) attempts at re-engaging with the PICTs.

Solomon Islands' economy is primarily linked to global trade in the export of commodities, in particular timber, palm oil and fisheries. Agriculture however remains an important feature of most households as the country is primarily rural and people grow part and sometimes all of their own food. Wage employment is limited, and the state is the main employer (Georgeou *et al.*, 2019). As Figure 8 and Figure 9 below shows, most of the aid funding is devoted to government and civil society programmes. Agriculture, Fishing and Forestry ranks 6th of 11 named sectors.

Fiji. Fiji is amongst the most developed states in the Pacific region with rich forests, minerals, and fish resources. Fiji's economy is diversified and is growing by virtue of its services sector which includes the Pacific's largest tourism industry, construction, manufacturing and its agricultural sector (DFAT, 2019b). Fiji's economy is however partly dependent on tourism and agriculture. Subsistence agriculture is largely practiced by local indigenous farmers while sugarcane is grown for commercial purposes (Britannica, 2022). The last Agricultural Census (2020) recorded 71,000 households whose main activity is agriculture (among a total of 191,910 private households in the 2017 population and housing census). Over the reference period (the 12 months preceding 10 Feb 2020) of the Census, the total volume of crop production in the country was recorded at 399,056.7 tonnes. The production of temporary crops represents 76.7% (306,035 tonnes) of total

[5] Figure 6 illustrates the termination of diplomatic relations with Taiwan, evidenced by the cessation of aid flows after 2019.

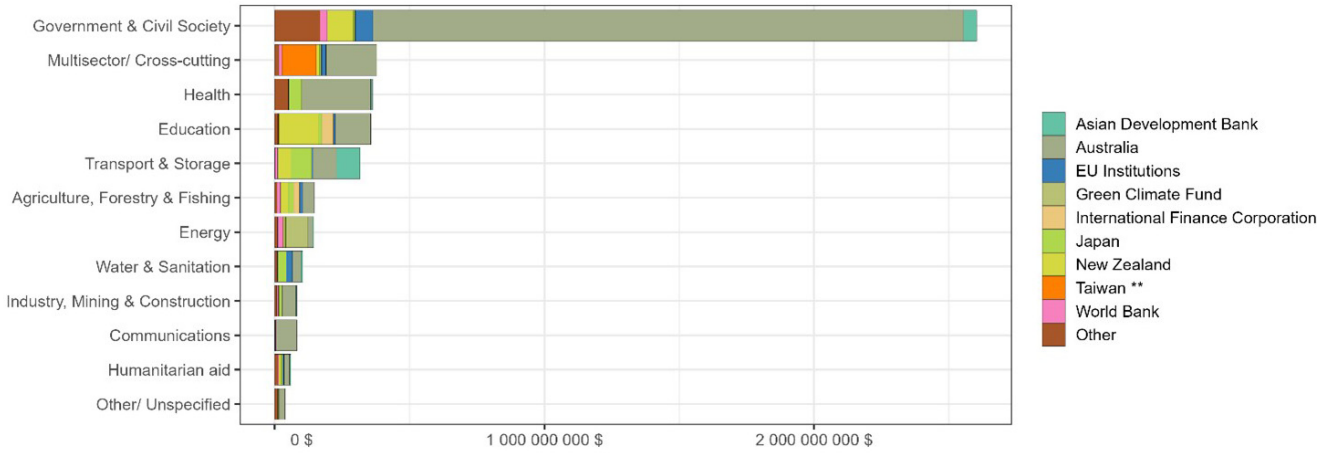

Figure 9. Total ODA and OOF received by Solomon Islands per sector between 2008 and 2021 (USD, 2021 constant prices). Source: Adapted from data from data from Lowy Institute Pacific Aid Map database (2024), data are publicly available.

crop production, while the remaining 23.3% (93,022 tonnes) is accounted for by permanent crops.

Fiji cannot be categorised as an "aid dependent country" (Schmaljohann & Prizzon, 2014). According to Lowy Institute Data, development aid represented c.3% of Fiji GDP during the 2010–2018 period, while personal remittances represented c.5% of GDP. This low rate is partly explained by Australia and New Zealand's 'smart sanctions' that were adopted after the 2006 coup which significantly reduced aid flows to the country, and which led to much closer relations between Fiji and China (O'Keefe, 2019). We note that development aid increased during the 2018–2021 period to c.15% of Fijian GDP.

Figure 10 below provides the top six ODA donors to Fiji. The World Bank appeared as a new actor with its emergency programs in response to Cyclone Winston in 2016. The World Bank (2021a) also funds a fiscal modernization program to reduce Fiji's external balance of trade. ADB becomes important only from 2020 because of its post-Covid 19 recovery programs and emergency responses.

As with PNG and Solomon Islands, Fiji's most aid-financed sector (See Figure 11) is "Government and civil society", although Fiji is characterized by the strong presence of the ADB in this sector, making it the largest donor, ahead of Australia (Figure 10 & Figure 12). This is due to the more than $330 million injected by ADB into this sector, 60% of

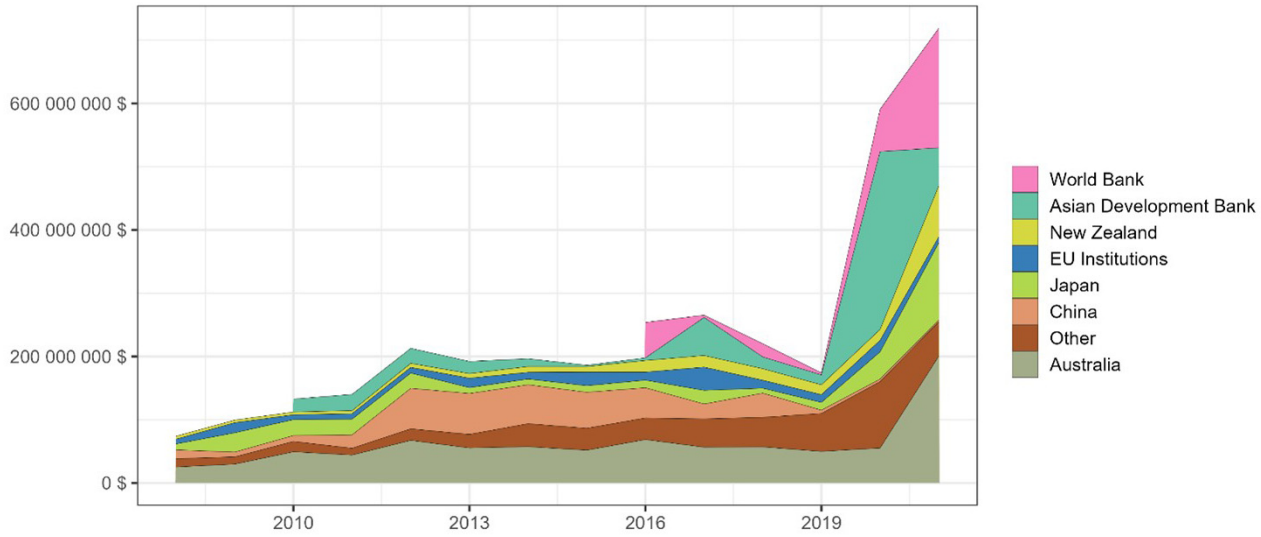

Figure 10. Evolution of ODA and OOF received by Fiji per donor between 2008 and 2021 (USD, 2021 constant prices). Source: Adapted from data from Lowy Institute Pacific Aid Map database (2024), data are publicly available.

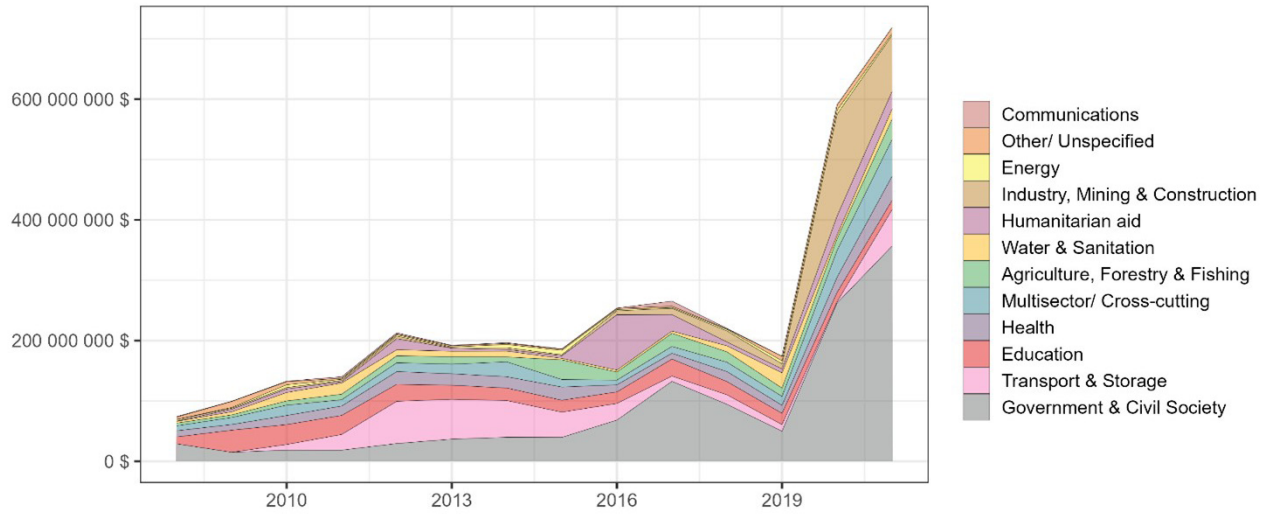

Figure 11. Evolution of ODA and OOF received by Fiji per sector between 2008 and 2021. (USD, 2021 constant prices). Source: Adapted from data from Lowy Institute Pacific Aid Map database (2024), data are publicly available.

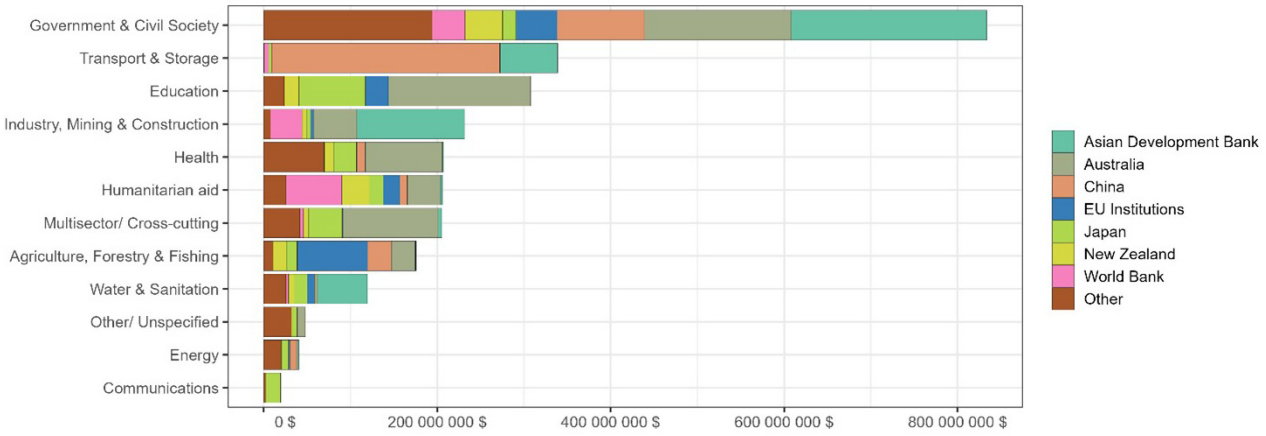

Figure 12. Total ODA and OOF received by Fiji per sector and donor (2008 to 2021). *Source:* Adapted from data from *Lowy Institute Pacific Aid Map database (2024)*, data are publicly available.

which relates to post Covid-19 aid programs. The more than $251 million injected by Australia into this sector is divided into multiple projects piloted by the Fijian government, which can be used to alleviate the public finance crisis to reduce debt to GDP ratio, or is spent on specific government projects aimed at building civil society (e.g. "Pacific Women Shaping Pacific Development").

Once again AFF is a low priority, ranking 7th of 11 named sectors, but EU institutions are the main donor in this sector.

Vanuatu. In 2021 the Vanuatu government budget was just over 52 bn Vatu (VDP, 2021) which at the time was equal to US$416 millions, while development aid (ODA + OOF) to Vanuatu represented $222 millions, or more than 50% of the total gov budget (Lowy Aid Map, 2024). Vanuatu can thus be considered as a "highly aid dependent" country as a good share of its services is financed by development assistance (Schmaljohann & Prizzon, 2014). Vanuatu's biggest aid donors are Australia, China, New Zealand, the World Bank and Japan. Aid from China rose sharply between 2013 and 2017, surpassing New Zealand aid in 2014 and Australian aid in 2017. However, as Figure 13 shows, Australia has increased its contribution significantly since 2019, while aid from other countries and multilateral institutions has decreased over this same period.

As Figure 14 shows, Vanuatu's Transport sector is the most allocated sector during the period, with almost US$600M constant USD and various projects concerning different infrastructure and islands: the US$73M Vanuatu Aviation Investment Project funded by the World Bank (IEG, 2019), the US$70M Luganville Wharf Redevelopment (AIDDATA, 2021b) and the US$45M road upgrade in Tanna and Malekula (AIDDATA, 2021c), both funded by China.

As with the other Melanesian PICTs, the "Government & Civil Society" sector is mainly funded by Australia and mostly concerns cooperation projects about police and justice (DFAT, 2016).

The third most funded sector is the "Education" sector, mainly funded by Australia and Japan in the framework of the "Vanuatu Education Road Map" project which is a multi-country agreement (Vanuatu Education Road Map, 2010).

Figure 15 shows the fourth most funded sector is the "Health" sector, over half of which comes from Australian Aid. AFF ranks 7th of 11, with a significant contribution from EU institutions, as is the case in Fiji.

We now turn to specifically examine aid donor support for agriculture within the AFF category, which we have established already as a relatively low priority for all donors.

ODA to Agriculture in Melanesian PICTs

General context and ODA to Agriculture. As Table 6 shows, agriculture plays a significant role in the four countries studied, but this vital aspect of economy and culture is not visible in the standard economic indicators (between 31% (SI) to 15% (Fiji) of the GDP in 2021). Agriculture in these four countries, is a complex interplay of traditional practices, modern influences, and is facing emerging challenges (migration, mining activity and climate change).

The majority of the inhabitants of PNG, Solomon Islands, Fiji, and Vanuatu practice subsistence agriculture. This form of agriculture, often referred to as horticulture, focuses on growing enough food to feed the farmer and their family (Bourke, 2019). Nevertheless, this subsistence family farming has a high level of productivity despite having less access to productive resources (inputs and support). For example, in Fiji, 84% of yams, cassava, corn and beans are farmed on only 47% of the land (FAO, 2014). That is why we propose to deepen our analysis of aid development strategies by examining the agriculture sector in the databases. Specifically we seek to understand "What is the place for agriculture in aid development flows?" "What type of projects are funded?" "Is there any difference between donors?" and "Are these projects adapted to

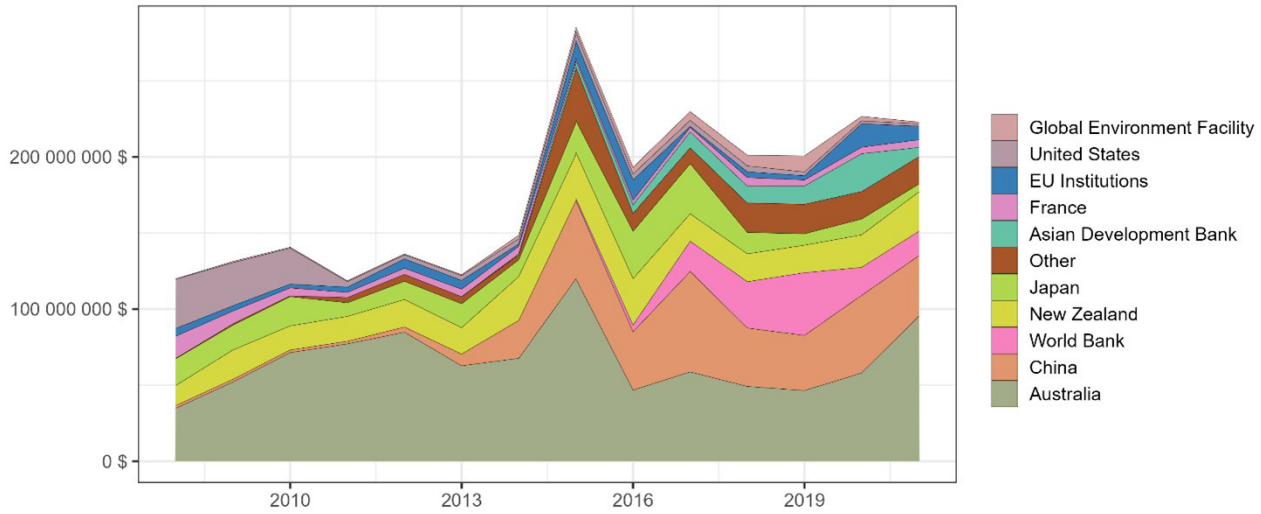

Figure 13. Evolution of ODA and OOF received by Vanuatu per donor between 2008 and 2021. (USD, 2021 constant prices). Source: Adapted from data from Lowy Institute Pacific Aid Map database (2024), data are publicly available.

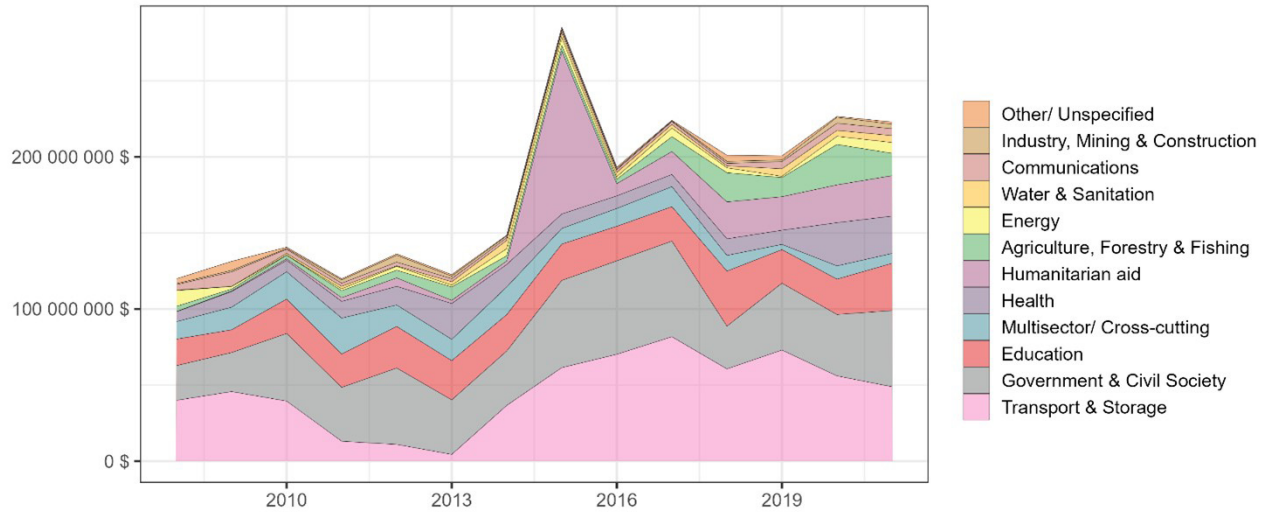

Figure 14. Evolution ODA and OOF received by Vanuatu per sector between 2008 and 2021 (USD, 2021 constant prices). Source: Adapted from data from Lowy Institute Pacific Aid Map database (2024), data are publicly available.

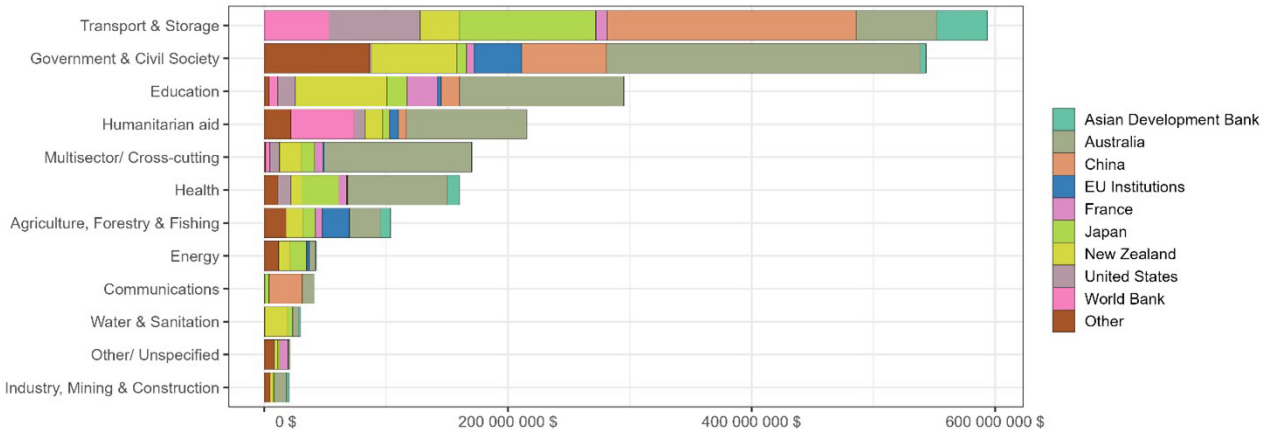

Figure 15. Total ODA and OOF received by Vanuatu per sector by donor between 2008 and 2021. (USD, 2021 constant prices). Source: Adapted from data from Lowy Institute Pacific Aid Map database (2024), data are publicly available.

Table 6. World development indicators for Agriculture in Melanesian countries (2020).

$	Fiji		Vanuatu		Papua New Guinea		Solomon Islands	
	2018	2021	2018	2021	2018	2021	2018	2021
Agriculture forestry and fishing value added (constant 2015 US$)	377 201 679	409 776 953	175 409 195	NA	4 166 520 942	4 387 003 381	466 911 044	NA
Agriculture forestry and fishing value added (% of GDP)	10.91	15.28	21.22	NA	16.97	18.99	33.97	NA
Agriculture forestry and fishing value added (annual % growth)	3.68	0.79	0.90	NA	4.57	1.08	0.38	NA
Employment in agriculture (% of total employment) (modelled ILO estimate)	29.52	29.40	51.05	43.47	20.06	18.97	38.84	37.88
Crop production ind. ex (2014-2016 = 100)	103.25	110.62	83.09	84.58	101.18	98.77	103.63	108.11
Food production index (2014-2016 = 100)	117.90	115.07	82.48	84.08	101.64	100.07	100.76	101.58

Source: Adapted from data from data.worldbank.org, data are publicly available.

the specificities of Melanesian agriculture and its subsistence dimension?"

The Agricultural sector comes under the wider category of "Agriculture, Forestry, Fishing" (AFF). The funds allocated to the AFF sector (Figure 16) spike in Fiji after 2015's Cyclone Pam then stabilise until 2019 and then increase; there is also a significant increase for Vanuatu. Figure 17 shows the allocated part of ODA to this sector oscillates between 5 and 7% for PNG, Solomon Islands and Vanuatu.

Figure 18 shows that in comparison to Gross Domestic Product (GDP), the ODA allocated to AFF is residual for PNG and Fiji (<1% of GDP), but it can oscillate between 1–2% of GDP for Solomon Islands and Vanuatu, the latter of which increases substantially after 2019.

As Table 7 illustrates, ODA Grants clearly dominate the AFF sector in all four PICTs.

When viewing by donor per recipient state we may see from Table 8 below that some aid donors are more active in some PICTs than in others. As previously indicated, EU institutions are demonstrably more engaged in the support of Fiji and Vanuatu's AFF sector.

Australia and the World Bank are two donors that distribute their aid across multiple countries. Australia provides 13% of its aid to Fiji, 12% to Vanuatu, 57% to Papua New Guinea, and 18% to the Solomon Islands. The World Bank, on the other hand, gives 20% to Fiji, 67% to Papua New Guinea, and 13% to the Solomon Islands. Some donors focus their aid on specific countries. For instance, the Asian Development Bank directs 70% of its aid to Papua New Guinea, while China concentrates 78% of its aid on the same country. Similarly, France directed all its aid to Vanuatu, and the Climate Investment Funds allocate all their aid to Papua New Guinea. In terms of recipients, Papua New Guinea receives the majority of AFF aid, with 51% of the total aid directed towards it. This is followed by Fiji (21%), the Solomon Islands (16%), and Vanuatu (12%). Within the 'III.1. Agriculture, Forestry, Fishing', (AFF) sector (Figure 19) we can distinguish the part allocated to each of the three sub-sectors.[6] We observe Agriculture is the most allocated sub-sector in three of the Melanesian PICTs between these three sub-sector categories, but in Solomon Islands the fishing sub-sector has a higher proportion of funding. Forestry receives the least aid by sub-sector (3–12%) in all the selected PICTs.

Examining disbursement repartition per donor for each PICT by AFF sub-sector (Figure 20) permits us to distinguish the main donors.

The ODA reimbursement repartition per subsectors and donors (Figure 20 above) shows that Australia is the main donor for Agriculture in PNG and Solomon Islands, and the EU is the main donor for Agriculture in Vanuatu and Fiji. Concerning Fishing, Solomon Islands is characterized by the presence of non-conventional donors for this sector: International Finance Corporation, Japan and NZ are the main donors for this sub-sector for Solomon Islands, while their contribution to others sub-sectors or other PICTs in Agriculture ODA is residual. Even if AFF is not its favoured sector for investment and support, China focuses its support to the Fishing sub-sector in PNG.

Agriculture in Papua New Guinea. As Figure 21 below shows, the most funded aspect of the PNG Agriculture sub-sector is "Fishery services" mostly funded by China (notably the controversial Pacific Marine Industrial Zone – PMIZ project)

[6] Some sub-sectors projects were only classified as "Agriculture, Forestry, Fishing" but recoding was done based on project titles.

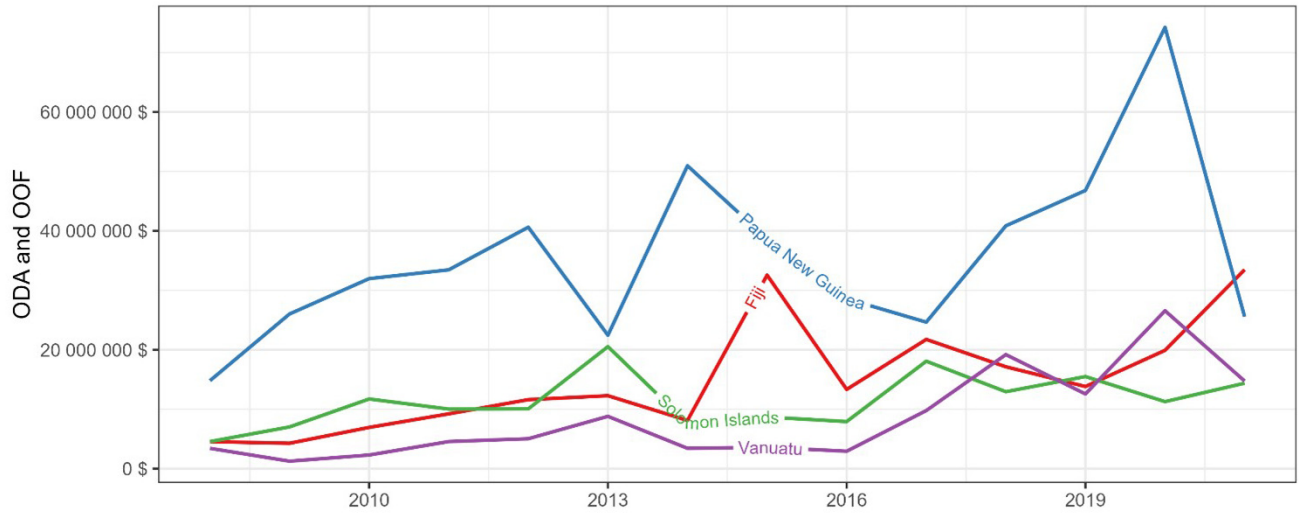

Figure 16. Development finance allocated to 'Agriculture, Forestry, Fishing' per recipient state & year (USD 2021 constant). Source: Adapted from data from Lowy Institute Pacific Aid Map database (2024), data are publicly available.

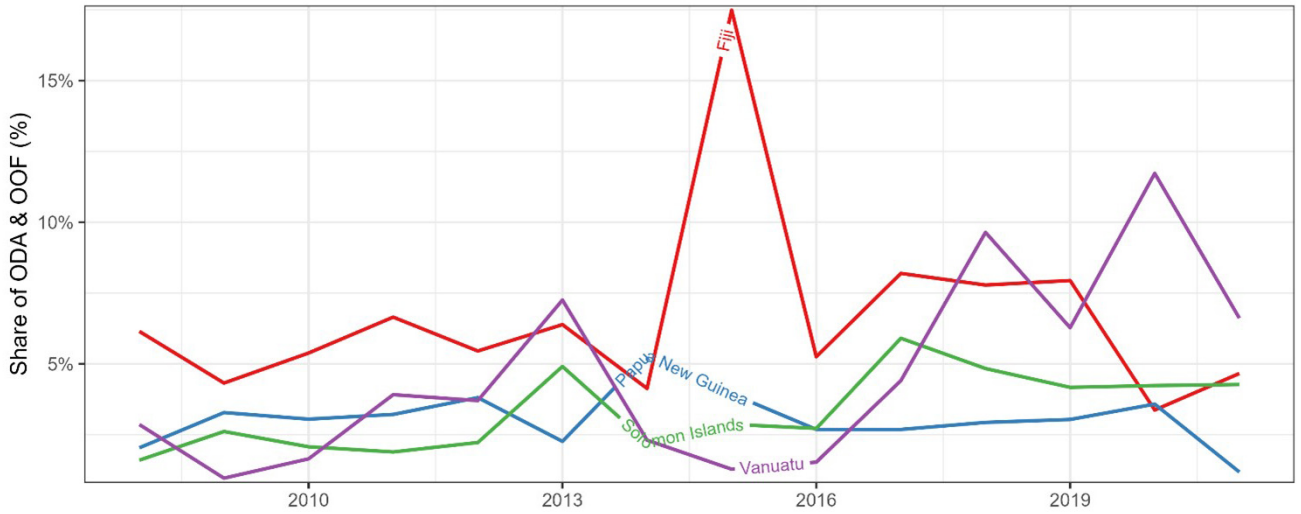

Figure 17. Part of development finance allocated to 'Agriculture, Forestry, Fishing' per recipient state & year (% of ODA and OOF). Source: Adapted from data from Lowy Institute Pacific Aid Map database (2024), data are publicly available.

(AidData, 2021a), and Japan for the Project for Rehabilitation of Alotau Town Market and Fisheries Facilities (JICA, 2019).

The second most funded category of project is "Agricultural Research", almost entirely funded by Australia and mainly composed by the Agricultural Research and Development Support Facility project (AusAID, 2012), funded by Australia destinated to "assist smallholder farmers by translating good science into sustainable and profitable farming practices", we can note that the increase of exportation revenue was mentioned in the project. Australia also funded ACIAR-AusAID partnerships in PNG which are included in this aspect.

The third is the "Agricultural development", mainly composed of the "PNG Productive Partnerships in Agriculture" funded by World Bank (IDA) (World Bank PNG, 2024a), the JUNCAO project, funded by China to develop mushroom cultivation (Xinhua, 2019), NZ projects to support smallholders, and other Japanese funding to the Agriculture sector.

The fourth most funded sector is the "Agricultural policy and administrative management" sector, constituted by the World Bank's "Productive Partnerships in Agriculture Project" (PPAP) and its "Smallholder Agriculture Development Project" (World Bank, 2013). We can note than these projects are

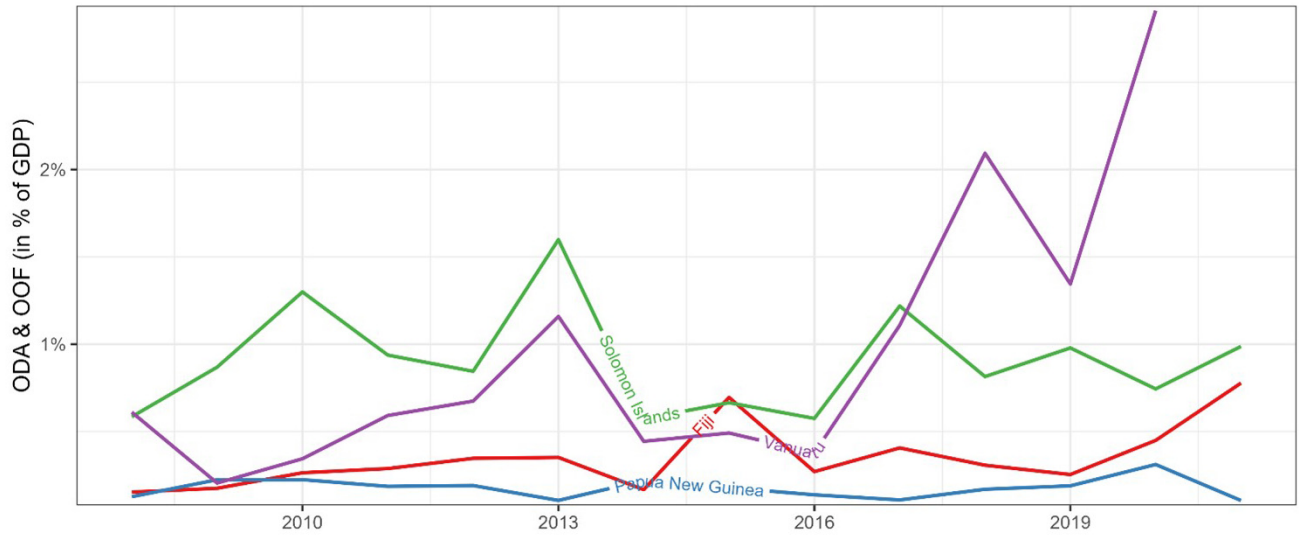

Figure 18. Part of development finance allocated to 'Agriculture, Forestry, Fishing' per recipient state & year (in % of GDP). Source: Adapted from data from Lowy Institute Pacific Aid Map database (2024) and SPC (2024) for GDP, data are publicly available.

Table 7. Development finance in Melanesian countries 2012–2021 for Agriculture, Forestry, Fishing period per flow type (Millions Constant USD).

Donor	Fiji	Vanuatu	Papua New Guinea	Solomon Islands	Total
ODA - Grant	189 (90%)	97 (82%)	334 (67%)	129 (81%)	749 (76%)
ODA - Loan	15 (7%)		145 (29%)	4 (2%)	164 (17%)
OOF - Grant		6 (5%)	0 (0%)	5 (3%)	11 (1%)
OOF - Loan	5 (2%)	16 (13%)	21 (4%)	22 (14%)	64 (6%)
Total	209 (100%)	119 (100%)	500 (100%)	160 (100%)	988 (100%)

Source: Adapted from data from Lowy Institute Pacific Aid Map database (2024), data are publicly available.

explicitly intended to improve specialisation in production; the PPAP is destinated to improve value chains for cocoa and coffee, and the SADP project is destinated to "improve revenue from oil palm". A part of China's funding for the PMIZ project is also classified in this category. There are also some Australian projects as the "Private sector and rural development" to encourage trade (AHC PNG, 2015) or the PHAMA-PLUS project (PHARMA Plus, 2024).

Concerning the "Food crop production" subsector, one part of the ADB COVID-19 rapid response program is classified in this category. Other projects are helping the Autonomous Bougainville Government by Australia, or the "Fresh Produce Supply Chain Investment", founded by NZ, linking areas of production with the private sector to improve agriculture production (NZMFAT, 2018).

Solomon Islands. As Figure 22 shows, the most funded aspect in Solomon Islands AFF sub-sectors is the "Fishery development" sector, constituted by IFC Loans to acquire fishing vessels (World Bank SI, 2017), NZ fisheries programs (NZMFAT, 2016), or programs by Japan (MOFA, 2012),[7] or Australia.[8]

The second most funded category is the "Agricultural development" sector, mainly funded by the EU Intuitions (70% of

[7] Agreements between Japan and Solomon Islands on Fisheries permit Japan to operate in Solomon Islands EEZ in exchange for financial and technical support.

[8] Notably the Fisheries Development Assistance for Pacific Island Nations-Solomon Islands (FDAPIN-SI) for annual inspection and repair (or replace with brand new equipment if necessary) of essential inshore fisheries-related equipment such as ice making machines, generators.

Table 8. Development finance in Melanesian countries for Agriculture, Forestry, Fishing during the 2012–2021 period (in Millions USD, 2021 constant prices) per donor.

Donor	Fiji	Vanuatu	Papua New Guinea	Solomon Islands	Total
Asian Development Bank	1 (3%)	8 (27%)	21 (70%)		30 (100%)
Australia	33 (13%)	32 (12%)	148 (57%)	48 (18%)	261 (100%)
China	27 (22%)		98 (78%)		125 (100%)
Climate Investment Funds			10 (100%)		10 (100%)
EU Institutions	88 (59%)	29 (20%)	18 (12%)	13 (9%)	148 (100%)
France	0 (0%)	6 (100%)	0 (0%)		6 (100%)
Germany	1 (10%)		8 (80%)	1 (10%)	10 (100%)
Global Environment Facility			22 (81%)	5 (19%)	27 (100%)
International Finance Corporation		2 (8%)		22 (92%)	24 (100%)
Japan	14 (13%)	10 (9%)	64 (59%)	21 (19%)	109 (100%)
Korea	2 (10%)	14 (67%)	2 (10%)	3 (14%)	21 (100%)
New Zealand	16 (16%)	15 (15%)	38 (38%)	32 (32%)	101 (100%)
Other	8 (53%)	2 (13%)	4 (27%)	1 (7%)	15 (100%)
World Bank	19 (20%)		65 (67%)	13 (13%)	97 (100%)
Total	209 (21%)	118 (12%)	498 (51%)	159 (16%)	984 (100%)

Source: Adapted from data from Lowy Institute Pacific Aid Map database (2024), data are publicly available.

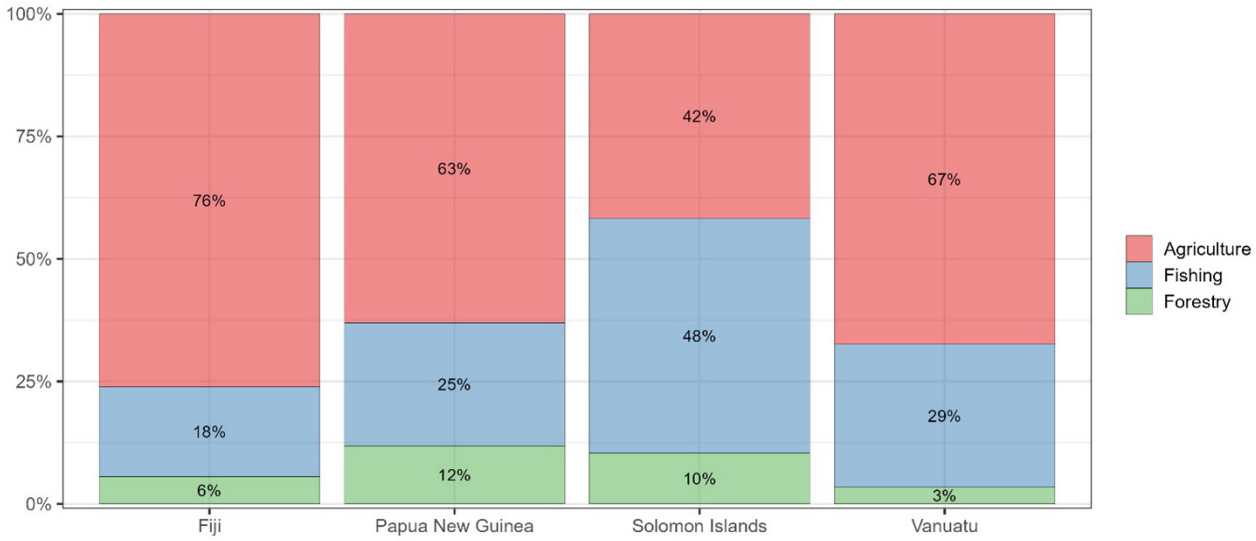

Figure 19. ODA disbursement repartition within AFF per sub-sector (in % of sector category). Source: Adapted from data from Lowy Institute Pacific Aid Map database (2024), data are publicly available.

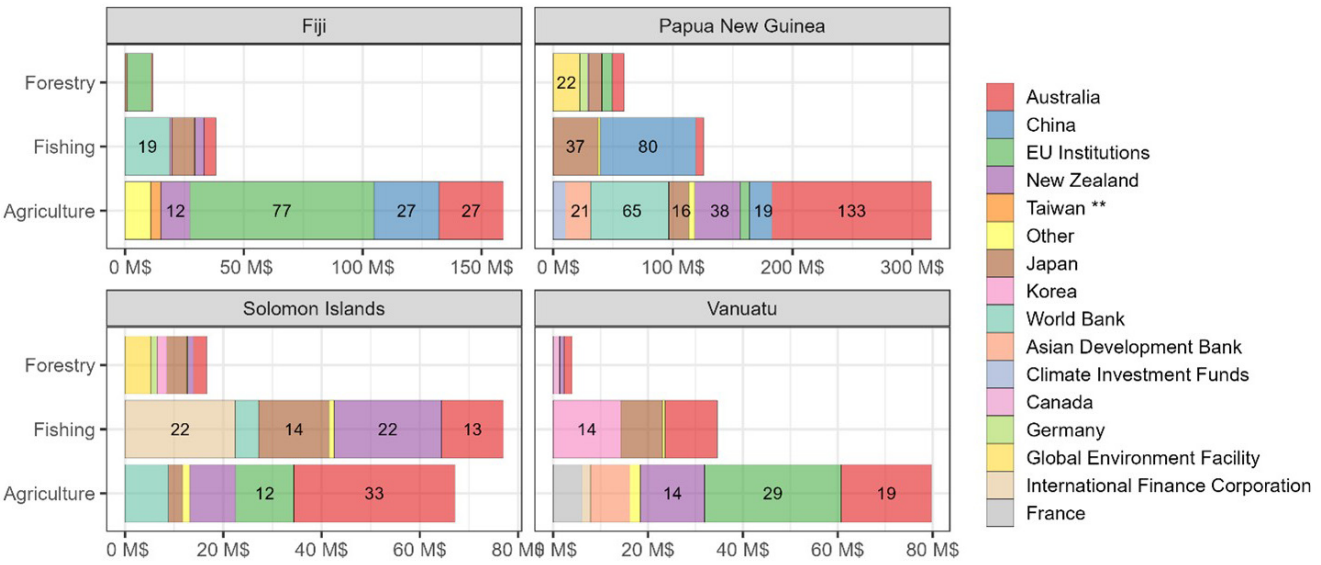

Figure 20. ODA disbursement repartition within 'III.1. Agriculture, Forestry, Fishing' per sub-sector & donor (in Millions USD Constant). ** Taiwan was recognised by Solomon Islands until 2019. Source: Adapted from data from Lowy Institute Pacific Aid Map database (2024), data are publicly available.

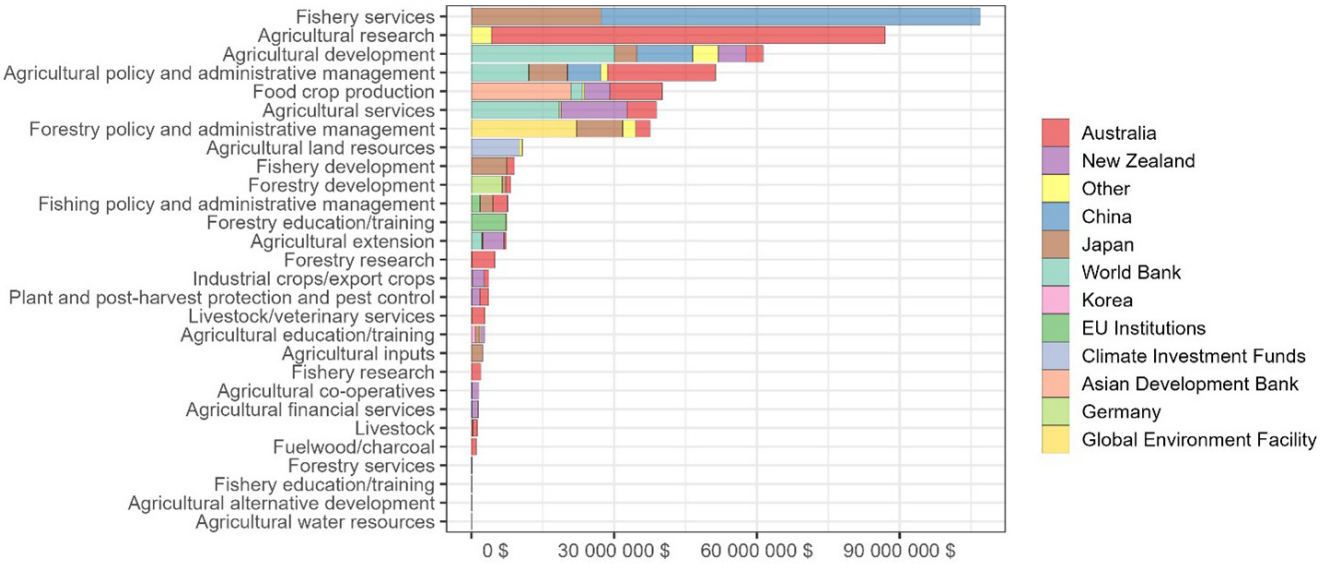

Figure 21. ODA disbursement repartition in PNG within 'III.1. Agriculture, Forestry, Fishing' per purpose name. Source: Adapted from data from Lowy Institute Pacific Aid Map database (2024), data are publicly available.

the funding) with the "Rural Development Program Phase II", which is a common program with IFAD (IFAD, 2015) directly allocated to PNG's Agriculture ministry; one of the program objectives was to "assist farming households to engage in productive partnerships with commercial enterprises".

The third is the "Fishing policy and administrative management" funded by NZ, Japan and Australia.[9]

The fourth is the "Agricultural policy and administrative management", principally funded by Australia and its Pacific Horticulture and Agriculture Market Access (PHAMA) Plus project (DFAT, 2018), and ACIAR projects on improving export cocoa quality (ACIAR, 2021).

The fifth aspect concerns "Agricultural research", mostly funded by Australia and unsurprisingly allocated to ACIAR projects.

There is no specific support for food crop production.

[9] Most funding goes to the Pacific Islands Forum Fisheries Agency, based in Honiara.

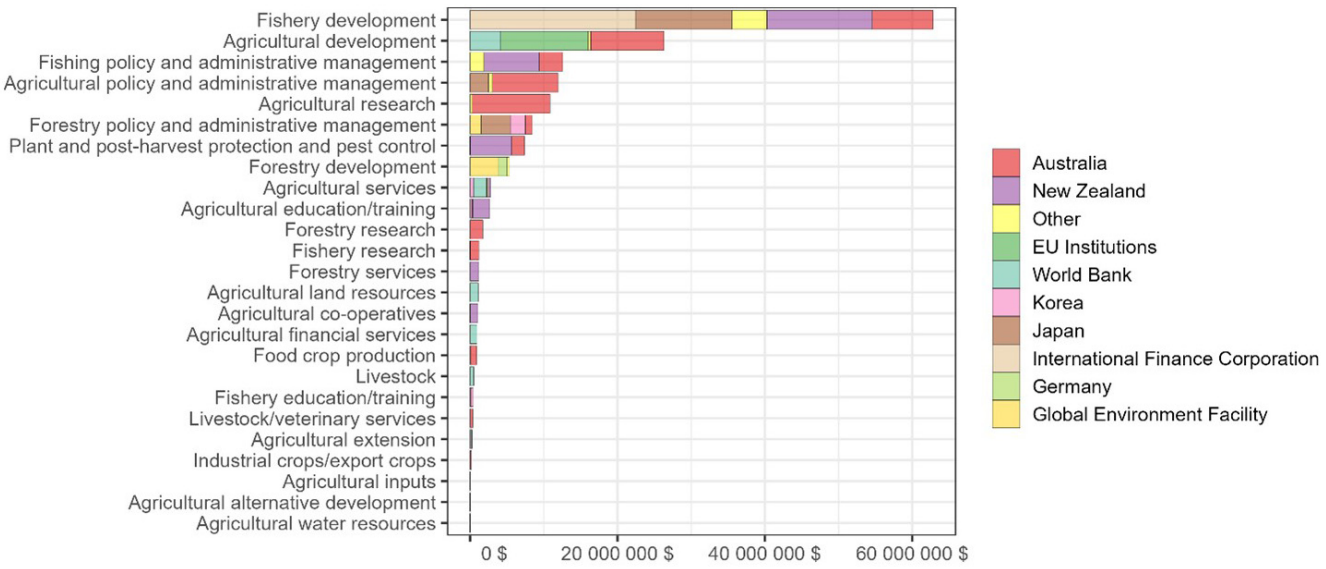

Figure 22. ODA disbursement repartition in Solomon Islands within 'III.1. Agriculture, Forestry, Fishing' per sector detailed. Source: Adapted from data from Lowy Institute Pacific Aid Map database (2024), data are publicly available.

Fiji. As Figure 23 shows, the most funded aspect in Fiji's AFF Agriculture sub-sector is the "Agricultural development" aspect, mostly comprised of the EU funded program "Support to sustainable Livelihoods",[10] the SPC-EU "Improving Key Services to Agriculture" (IKSA) project (Relief Web, 2017), and the NZ program "Fiji Dairy Industry Development Initiative" (Prime, 2017).

The second most funded aspect is "Fishing policy and administrative management", most of the funding for which is actually drawn from the recent World Bank "Fiji - Recovery and Resilience First Development Policy Operation with a Catastrophe-Deferred Drawdown Option" (World Bank, 2021b). The third most funded aspect is "Agriculture policy and administrative management", mostly composed of SPC-EU agreements, the Junca Mushroom project from China, Taiwanese funding for dragon fruit production, and some Japanese funding.

The third most funded concern Agricultural Research and is essentially constituted of ACIAR funding and some grant contracts between EU and Sugar Research Institute of Fiji, in collaboration with Australia (Narayan, 2021).

The fourth most funded category is "Industrial crops/export crops", almost fully funded by EU Institutions, and mainly allocated to the "Rural Access Roads and Associated Infrastructure (RARAI)" project (Pacific Community, 2014). New Zealand funds all of the less than 1% of aid that is dedicated to Fijian food crop production.

The fifth is the "Agricultural education/training" aspect and is constituted of the Mushroom Technology Demonstration Center, funded by China (MOFO PRC, 2019), the EU funded "Fiji pro-resilience project" to reduce food insecurity (FAO, 2019), and some Australian funding to University of the South Pacific.

Vanuatu. As Figure 24 shows, the most funded aspect in the Vanuatu AFF is "Agricultural development", mostly constituted by the EU funded program "Vanuatu Value Chain (VaVaC) Budget Support program." (EU, 2021), NZ funded program "Strengthening Agriculture Value Chains" and some funding from France or Japan.

The second most funded aspect is "Agricultural research", mainly funded by Australia's ACIAR, but one part of which comes from France, which finances research into healthy rice fields.

The third largest aspect is "Fishing policy and administrative management" mainly funded by Japan and allocated directly to the Vanuatu government. Funding from Australia in this aspect is allocated through the Forum Fisheries Agency.

The fourth is the "Food crop production", which consists of the ADB's "COVID-19 Fiscal Response Program" (ADB Vanuatu, 2020).[11]

The fifth aspect concerns "Fishery development" and is almost entirely constituted by the "Pacific Patrol Boat Program" funded by Australia.

[10] The EU provides a further $12.3 million to Fiji through Budget Support to enhance sustainable rural livelihoods.

[11] Some parts of the programme concern "food security" so this can explain the classification of one part of the project.

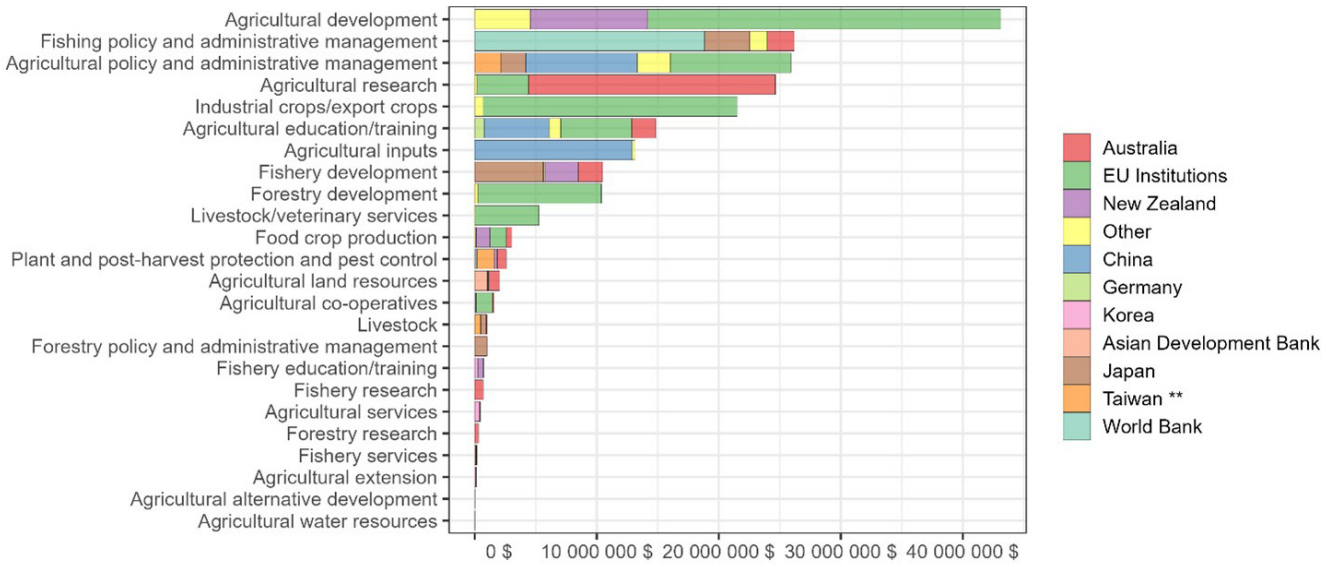

Figure 23. ODA disbursement repartition in Fiji within 'III.1. Agriculture, Forestry, Fishing' per sector detailed. Source: Adapted from data from Lowy Institute Pacific Aid Map database (2024), data are publicly available.

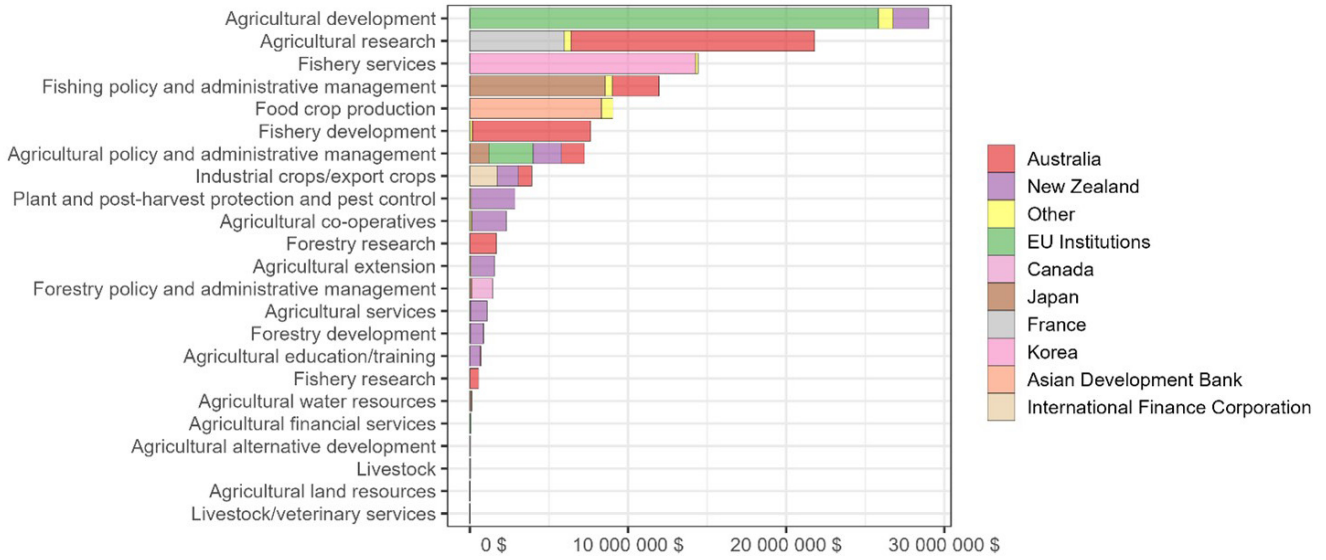

Figure 24. ODA disbursement repartition in Vanuatu within 'III.1. Agriculture, Forestry, Fishing' per sector detailed. Source: Adapted from data from Lowy Institute Pacific Aid Map database (2024), data are publicly available.

Discussion

We have focussed on aid to agriculture as Melanesia is predominantly rural, and because there is scope for increasing local food production, decreasing consumption of imported foods, reducing the balance of payments and improving health outcomes (Georgeou *et al.*, 2024). These ambitious objectives can be achieved and supported, however currently donor strategies barely contribute to them.

Charting aid donor flows within AFF for each PICT allows us to look at how they support agriculture in these countries. In fact, linking donors with their main interests, and with their underlying approach to how aid to agriculture contributes to development shows that strategic orientations of development aid remain narrowly focused on economic growth, market access and the development of high value-added chains for export. Little attention or money are given to food crop production or to adaptation of these technical crop systems to climate change.

This analysis quantitatively confirms the qualitative analysis of development narratives of Stronge *et al.* (2020) that

PNG, SI, Fiji and Vanuatu are clearly facing "retroliberalism" strategies of donors. Moreover, ODA to agriculture, forestry and fishing which falls under the category of "aid to productive sectors", represents a very small share of total development finance to these four Melanesian states. The bulk of ODA to agriculture actually goes to agricultural research—mostly led by non-Pasifika people—agricultural development and administrative management.

The underlying donor approach to agricultural development remains focused on market forces, trade and privatisation, in line with the increasing priority and prominence given by national governments to the private sector in their aid programmes (Mawdsley *et al.*, 2018), especially by Australia and New Zealand.

Furthermore, despite the use by both multilateral and bilateral donors of words like "livelihoods" or "smallholders", our analysis finds even multilateral organisations such as the Food and Agriculture Organization (FAO) or the International Fund for Agricultural Development (IFAD) have a market-centric approach to agricultural development that encourages niche production of specific crops for the global market, rather than supporting wider growth of domestic agricultural production that could result in more equitable development outcomes and better nutrition in Melanesia.

Mapping shows a very strong correlation in specific sectors, however given the increased importance of food security, it is alarming that family farming seems to be an absent notion from all donor aid projects. Even when "livelihoods" or "smallholders" words are used such projects attract low funding, while terms such as "family farming" and "subsistence agriculture" are totally absent.

Conclusion

With food security a growing issue in the Pacific, donors to the larger PICTs could better support investment in food crop production. Our study has found aid investment in agriculture at critically low levels, and what funding there is appears devoted to research into improving crop yield for export, rather than on increasing production through local food farming. Even when food security or smallholders are mentioned in projects, funding is mostly destined to improve specialisation in production for products destined for export.

Arguably, food security is a part of any development puzzle. Currently Melanesian PICTs are focused on the export of commodities, including fish, and what is exported from the agricultural sector are niche products. This strategy, which takes little or no account of local farming practices, seems to be shaped by development aid.

To meet the challenges of sustainable development and end hunger, aid donors to Melanesia could undoubtedly diversify their support strategies, in particular by supporting improving local food production, through the maintenance and support of family farming. By so doing they can invest in family farming and infrastructure transport links that will enable greater distribution of fresh local produce, thus increasing wealth for communities, especially women, as well as improving the consumption of more nutritious local foods, cutting down imports and improving food sovereignty.

Ethics and consent

Ethical approval and consent were not required.

Data availability

All tables in this article have been created by the authors from open access and publicly available free source data available from the Lowy Institute, UN Comtrade, and the World Bank. For each table we have acknowledged the original data source and provided a link in the references.

Lowy Institute (2024). 'Pacific Aid Map', *https://pacificaidmap.lowyinstitute.org/about*

GDP for Pacific Countries, Pacific community: *https://sdd.spc.int/dataset/df_national_accounts*

World Bank Indicators: *https://data.worldbank.org/indicator*

UN Comtrade database : *http://data.un.org/Explorer.aspx?d=ComTrade*

References

ACIAR: **Improved processing to boost cocoa quality in the Pacific**. 2021.
Reference Source

ADB: **Papua New Guinea: Lae Port Development Project**. 2017.
Reference Source

ADB: **Papua New Guinea: COVID-19 Rapid Response Program**. 2022.
Reference Source

ADB: **Papua New Guinea: Civil Aviation Development Investment Project II**. 2024.
Reference Source

ADB/PNG: **Loan Agreement: Health Services Sector Development Program**. 2020.
Reference Source

ADB/Vanuatu: **Grant Agreement**. 8 December, 2020.
Reference Source

AHC (Australian High Commission) PNG: **Supporting Private Sector Development in PNG**. 2015.
Reference Source

AIDDATA: **Project ID: 64653**. 2021a.
Reference Source

AIDDATA: **Project ID: 37748**. 2021b.
Reference Source

AIDDATA: **Project ID: 37763**. 2021c.
Reference Source

AIFFP (Australian Infrastructure Financing Facility for the Pacific): **Australia's**

AUD72 million investment transforms roads, boosts markets for local women. 8 March, 2024.
Reference Source

Al Jazeera: **Nauru seals diplomatic ties with China after dumping Taiwan**. 2024.
Reference Source

AusAid: **From seed to scale up**. 2012.
Reference Source

Baldacchino G: **Managing the hinterland beyond: Two ideal-type strategies of economic development for small island territories.** *Asia Pacific Viewpoint.* 2006; **47**(1): 45–60.
Publisher Full Text

Bertram IG, Watters RF: **The MIRAB economy in South Pacific microstates.** *Pacific Viewpoint.* 1985; **26**(3): 497–519.
Publisher Full Text

Bourke M: **Subsistence food production in Melanesia**. In: Eric Hirsch and Will Rollason (Ed.), *The Melanesian World.* (1st Edition ed.,). Routledge, 2019; 143–163.
Reference Source

Britannica: **Economy of Fiji**. 2022.
Reference Source

Carroll T, Hameiri S: **Good governance and security: the limits of Australia's new aid programme.** *J Contemp Asia.* 2007; **37**(4): 410–30.
Publisher Full Text

CFE-DM (Centre for Excellent Disaster Management): **Solomon Islands Disaster Management Reference Handbook 2023**. 2023.
Reference Source

China Embassy NZ: **Remarks by HE Dr Wang Xiaolong at the challenge of the Pacific Virtual Event**. 26 September 2023, 2024.
Reference Source

Connolly P: **The belt and road comes to Papua New Guinea: Chinese geoeconomics with Melanesian characteristics?** *Security Challenges.* 2020; **16**(4): 41–64.
Reference Source

Deng J: **An explanation for the decline of China's aid in the pacific lowy institute**. Lowy Institute, 2022.
Reference Source

DFAT: **PNG health system capacity development program: design and implementation framework**. 2012.
Reference Source

DFAT: **Stretem Rod Blong Jastis mo Sefti (SRBJS) Vanuatu-Australia policing and justice program 2017–2020 program design document**. 2016.
Reference Source

DFAT: **Pacific Horticulture and Agriculture Market Access (PHAMA) plus investment design document**. 2018.
Reference Source

DFAT: **Stepping up engagement with our Pacific family**. September, 2019a.
Reference Source

DFAT: **Insights Fiji**. 2019b.
Reference Source

DFAT: **Australia's support to law and justice in Papua New Guinea**. 2019c.
Reference Source

DFAT: **Australia's official development assistance DEVELOPMENT BUDGET SUMMARY 2023–24**. 2023.
Reference Source

DFAT: **Australia's development partnership with Papua New Guinea**. 2024a.
Reference Source

DFAT: **Our Embassies and Consulates Overseas**. 2024b.
Reference Source

Donortracker.Org: **Japan marks 70 years of ODA**. June 14, 2024.
Reference Source

EU: **European Union provides support to the productive sector in Vanuatu**. 2021.
Reference Source

FAO: **Pro-Resilient Fiji – Strengthening climate resilience of communities for food and nutrition security.** 2019.
Reference Source

FAO: **Family Farmers Feeding the world, caring for the earth.** 2014; 4.
Reference Source

FAO: **Fiji Agricultural Census**. 2020.
Reference Source

Fortier SM, Hammarstrom JH, Ryker SJ, *et al.*: **USGS critical minerals review.** *Min Eng.* 2019; **71**(5) 35–47.
Reference Source

Georgeou N: **Neoliberalism, development, and aid volunteering**. Routledge, 2012.
Reference Source

Georgeou N, Hawksley C: **Australian aid in the pacific Islands**. 26 July, 2016.
Reference Source

Georgeou N, Hawksley C, Monks J, *et al.*: **Food security and asset creation in Solomon Islands: Gender and the political economy of agricultural production for Honiara central market.** *Portal: Journal of Multidisciplinary International Studies.* 2019; **16**(1/2): 101–18.
Reference Source

Georgeou N, Molimau-Samasoni S, Hawksley C: **Gender, diversity, culture, and the Pacific food system : exploring sustainability.** *Food Australia.* 2024; **76**(1): 22–24.
Reference Source

Hawksley C: **Australia's aid diplomacy and the pacific Islands: change and continuity in middle power foreign policy.** *Glob Change, Peace Secur.* 2009; **21**(1): 115–130.
Publisher Full Text

Hawksley C: **Geopolitics abound at the 2023 pacific games in solomon Islands.** East Asia Forum, 11 December 2023.
Reference Source

Hawksley C, Georgeou N: **The responsibility to protect and the "responsibility to assist": developing human rights protection through police building.** In: D. Mayerson ed. *The United Nations and Genocide*, Palgrave, 2016; 188–209.
Reference Source

Hawksley C, Georgeou N: **Sogavare shakes up Solomon Islands' development strategy**. August, 2019.
Reference Source

Hawksley C, Georgeou N: **Small states in the Pacific: sovereignty, vulnerability, and regionalism.** In: Thomas Kolnberger and Harlan Koff (eds), *Agency, Security and Governance of Small States: A Global Perspective*, Routledge, London/New York, Routledge, 2023; 139–157.
Publisher Full Text

Hawksley C, Ward R: **Ripples of decolonisation in the Asia-Pacific.** *Portal: J Multidiscip Int Stud.* 2019; **16**(1/2): 1–10.
Publisher Full Text

Hawksley C: **Hegemony, education, and subalternity in colonial Papua New Guinea.** In: Richard Howson and Kylie Smith (eds), *Hegemony: Studies in Consensus and Coercion*, Routledge, New York/London, 2008; 142–158.
Reference Source

Hegarty D: **A changing Oceania.** In: D. Hegarty & D. Tryon (Eds.), *Politics, Development and Security in Oceania*, ANU Press, 2015; 1–25.
Reference Source

IEG (Independent Evaluation Group): **Vanuatu aviation investment project (P154149)**. 2019.
Reference Source

IFAD: **Rural Development Programme - phase II**. 2015.
Reference Source

Islam MS, Kieu E: **Climate change and food security in ASEAN.** *Clim Chang Food Secur Asia Pacific: Response Resilience.* 2021; 43–71.
Publisher Full Text

Japan PNG: **Japan's ODA Policy for the Independent State of Papua New Guinea (PNG)**. 2012.
Reference Source

Jayaraman TK, Choong CK, Kumar R: **Role of remittances in small Pacific Island economies: an empirical study of Fiji.** *Int J Econ Bus Res.* 2011; **3**(5): 526–542.
Publisher Full Text

JICA: **Interview with Hiromi Obata (JICA) with C. Hawksley and N. Georgeou, 3 December. 2012.**

JICA: **The project for rehabilitation of Alotau Town market and fisheries facilities**. 2019.
Reference Source

Katada SN, Liao J: **China and Japan in pursuit of infrastructure investment leadership in Asia: competition or convergence?** *Glob Gov: Rev Multilateralism Int Organ.* 2020; **26**(3): 449–472.
Publisher Full Text

Kemakeza A: **Interview with C. Hawksley and N. Georgeou, Savo Island, 24 November 0212. 2012.**

Knoerich J, Urdinez F: **Contesting contested multilateralism: why the west joined the rest in founding the Asian Infrastructure Investment Bank.** *Chinese J Int Polit.* 2019; **12**(3): 333–370.
Publisher Full Text

Koff H, Kolnberger T: **Introduction: agency, security, and governance of small states in a fast-changing world.** In: Thomas Kolnberger and Harlan Koff (eds), *Agency, Security and Governance of Small States: A Global Perspective*, Routledge, London/New York, 2023; 1–10.
Publisher Full Text

Ky S, Lee CW, Stauvermann PJ: **A comparative study on characteristics of ODA of China-Japan-Korea to Cambodia.** *East Asian Econ Rev.* 2012; **16**(4): 333–361.
Reference Source

Lowy Institute: **Pacific aid map**. 2024.
Reference Source

Mawdsley E, Murray WE, Overton J, *et al.*: **Exporting stimulus and 'shared prosperity': reinventing foreign aid for a retroliberal era.** *Dev Policy Rev.* 2018; **36**(S1): O25–43.
Publisher Full Text

MOFA (Japan Ministry of Foreign Affairs): **Country assistance policy for Solomon Islands**. 2012.
Reference Source

Ministry of Foreign Affairs (MOFA) Japan: **Japan's ODA: Rolling Plan for Papua New Guinea**. 2016.
Reference Source

Ministry of Foreign Affairs (MOFA) Japan: **White Paper on Development Cooperation.** Ch 3: Oceania. 2022.
Reference Source

MOFO PRC (Ministry of Foreign Affairs/People's Rep. of China): **Juncao spreads its magic in Fiji**. 2019.
Reference Source

MOFA PRC: **Joint statement of China-Pacific island countries foreign ministers' meeting**. 21 October, 2021.
Reference Source

Narayan V: **EU provides a further $12.3 million to Fiji through budget support to enhance sustainable rural livelihoods**. Fiji Village, 1 September, 2021.
Reference Source

NZMFAT (New Zealand Ministry of Foreign Affairs): **Solomon Islands fisheries programme – offshore & inshore fisheries advisors**. 2016.
Reference Source

NZMFAT: **Evaluation of New Zealand's country programme in PNG**. 2018.
Reference Source

O'Keefe M: **The militarisation of China in the Pacific: stepping up to a New Cold War?** *Security Challenges.* 2020; **16**(1): 94–112.
Reference Source

O'Keefe M: **The implications of Australia's 'smart sanctions' against Fiji 2006 to 2014 for geopolitical contest in the South Pacific.** *East Asia.* 2021; **39**: 1–18.
Reference Source

Pacific Community: **RARAI: Rural Access Roads and Associated Infrastructure**. 2014.
Reference Source

PHAMA Plus: **Welcome to the PHAMA plus program**. 2024.
Reference Source

Prime: **Fiji Dairy Industry Development Initiative (FDIDI)**. 2017.
Reference Source

Pryke K, Dayant A: **China's declining pacific aid presence lowy institute**. Lowy Institute, 2021.
Reference Source

Rajah R, Dayant A, Pryke J: **Belt and road and debt diplomacy in the pacific lowy institute**. Lowy Institute, 2019.
Reference Source

Relief Web: **Fiji government receives equipment through EU-SPC improvement of key services to agriculture project**. 2017.
Reference Source

SBS News: **Solomons mission cost $2.8bn**. 2017.
Reference Source

Schmaljohann M, Prizzon A: **The age of choice: Fiji and Vanuatu in the new aid landscape**. ODI Report. (London: Overseas Development Institute), 2014.
Reference Source

Smith G: **Ain't no sunshine when Xi's gone: what's behind China's declining aid to the pacific?** November, 2021.
Publisher Full Text

Smith G, Wesley-Smith T, (eds).: **The China alternative: changing regional order in the Pacific Islands**. 2021.
Publisher Full Text

Sora M: **A security agreement between China and Solomon Islands could impact stability in the whole Pacific.** The Guardian, 2022.
Reference Source

Stone RW, Wang Y, Yu S: **Chinese power and the state-owned enterprise.** *Int Organ.* 2022; **76**(1): 229–250.
Publisher Full Text

Stronge D, Scheyvens R, Banks G: **Donor approaches to food security in the Pacific: Sustainable Development Goal 2 and the need for more inclusive agricultural development.** *Asia Pac Viewp.* 2020; **61**(1): 102–117.
Publisher Full Text

Tetra Tech: **Review of the PNG-Australia Transport Sector Support Program Phase 2 (TSSP2) review report**. 2022.
Reference Source

UNHDI: **Country insights.** UNHDR Rankings, 2022.
Reference Source

Vanuatu ADB: **Grant agreement COVID-19 fiscal response program**. 2020.
Reference Source

Vanuatu Daily Post: **VT52 Billion National Budget Approved**. 2021.
Reference Source

Vanuatu Education Road Map: **Joint Partnership Agreement**. 2010.
Reference Source

Varrall M: **Australia's response to China in the Pacific: from alert to alarmed.** In: *The China Alternative*. *Graeme Smith and Terence Wesley-Smith* (eds), ANU Press, 2021; 107–142.
Publisher Full Text

VIF (Vivekananda International Foundation) Brief: **The China-Solomon Islands bilateral security pact**. 2022.
Reference Source

World Bank: **Papua New Guinea smallholder agriculture development project**. 2013.
Reference Source

World Bank: **Fiji: first and second fiscal sustainability and climate resilience DPO**. 2021a.
Reference Source

World Bank: **Recovery and resilience first development policy operation with a catastrophe-deferred drawdown option**. 2021b.
Reference Source

World Bank Country Data. 2024.
Reference Source

World Bank PNG: **PNG productive partnerships in agriculture**. AusAID existed from 1973–2014 when it was incorporated into DFAT, 2024a.
Reference Source

World Bank PNG: **The world bank in Papua New Guinea**. 2024b.
Reference Source

World Bank SI: **Solomon Islands sustainable fisheries and jobs**. 2017.
Reference Source

Xinhua: **China launches new project to help PNG agricultural development**. 2019.
Reference Source

Open Peer Review

Current Peer Review Status: ? ? ?

Version 1

Reviewer Report 05 November 2025

https://doi.org/10.21956/openreseurope.19150.r55736

© **2025 Daccache M.** This is an open access peer review report distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

?

Melodie Al Daccache
ISDC - International Security and Development Center, Berlin, Germany

Summary:
The paper titled "Towards 'retroliberalism' or food security?: Donor development aid to the agricultural sectors of four Melanesian states, 2008-2021" provides a comprehensive analysis of international aid flows in 4 PICTs.

The paper provides clear information on the complex geopolitical situation and examines the vulnerabilities of PICTs, using qualitative data from major aid databases.

The paper highlights the "retroliberalism" strategy being used, as current aid strategies in agriculture are predominantly market centric and export-oriented, rather than family farming and local food production.

Strength:
1. The paper is very informative and clearly describe the context and the issue. The findings are supported by data represented in graphs.
2. The study design which is a comparative analysis using quantitative data, actually answers the study objectives
3. The paper clarify all the primary data sources used
4. The conclusion, which is embedded in the discussion part, is robust and support the study objectives

Suggestions for improvement:
1. Explicitly state the research question in the introduction. It will be useful to add a concise research question at the end of your introduction to sharper the focus of the paper from the start
2. It was a bit confusing to include 'general context' as part of the 'Methods' section. Maybe consider a "context or background" title with all these context information.
3. In the introduction, it would be great to reference papers showing what we already know from the literature on aid for agriculture support.
4. The methods section needs further clarification. For example, what kind of descriptive analysis

to expect, statistics or software used, or briefly why these databases were chosen, why those countries were chosen, etc.
5. Maybe consider placing the graphs after the texts, especially for their abundance makes it was a bit challenging to flip back and forth.

While minor comments exist, the paper is overall great.

Is the work clearly and accurately presented and does it engage with the current literature?
Yes

Is the study design appropriate and is the work technically sound?
Yes

Are sufficient details of methods and analysis provided to allow replication by others?
Yes

Are all the source data and materials underlying the results available?
Yes

If applicable, is the statistical analysis and its interpretation appropriate?
Yes

Are the conclusions drawn adequately supported by the results?
Yes

Competing Interests: No competing interests were disclosed.

Reviewer Expertise: My research stand on the intersection of development economics and public health nutrition. While my research touches on agricultural and economic aspects, my expertise in political economy is more limited.

I confirm that I have read this submission and believe that I have an appropriate level of expertise to confirm that it is of an acceptable scientific standard, however I have significant reservations, as outlined above.

Reviewer Report 04 November 2025

https://doi.org/10.21956/openreseurope.19150.r55484

© 2025 NAWAZ T. This is an open access peer review report distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

?

TAUFIQ NAWAZ
South Dakota State University, Brooking, USA

This manuscript presents a relevant and well-structured analysis of development aid directed to the agricultural sectors of Papua New Guinea, Solomon Islands, Vanuatu, and Fiji from 2008 to 2021. It critically evaluates the donor-driven, export-oriented aid strategies and highlights their limited contribution to local food security and agricultural resilience, particularly under the growing threat of climate change.
The study is supported by robust data (Lowy Institute, OECD, World Bank) and offers insightful commentary on geopolitical influences, especially from Australia, China, and Japan. The argument that aid remains aligned with "retroliberal" economic agendas rather than addressing the needs of local farming systems is well substantiated.

- **Definition and Operationalization of "Retroliberalism"**
  - *Question*: Can the authors elaborate more precisely on how they define and operationalize "retroliberalism" in the context of development aid? How does it differ from or relate to neoliberalism in practice?
  - *Suggestion*: Consider providing a concise operational definition early in the introduction and ensure consistent usage throughout the text.
- **Treatment of 'Family Farming' and 'Smallholders' in Donor Narratives**
  - *Question*: Did the authors perform any keyword analysis or coding to systematically evaluate how often and in what contexts terms like "family farming," "subsistence," or "smallholders" appear in donor project documentation?
  - *Suggestion*: A simple table or chart with term frequencies across major donors could enhance transparency and support claims of conceptual neglect.
- **Country-Specific Aid Flow Disparities**
  - *Question*: The manuscript could benefit from clearer distinctions between the four countries—how do aid volumes, types of support, or donor diversity differ across PNG, Fiji, Solomon Islands, and Vanuatu?
  - *Suggestion*: A comparative table summarizing aid composition by country and sector would be a valuable addition.
- **Climate Resilience and Agricultural Aid**
  - *Question*: Given the strong climate vulnerability of Pacific states, could the authors include a brief assessment of how much (if any) agricultural aid explicitly targets climate adaptation or resilience?
  - *Suggestion*: Even a qualitative remark on this could strengthen the argument for redirecting aid priorities.
- **Aid Effectiveness and Local Participation**
  - *Question*: Were there any donor programs that showed success or involved participatory approaches with local farmers that could serve as models?
  - *Suggestion*: Including a few positive examples (if available) would create a more balanced and constructive critique.

Suggested Citations and Justifications
To enhance the academic depth and global relevance of the manuscript, the authors are encouraged to incorporate the following recent studies, which directly align with the themes of **food security, sustainable agriculture, and climate change adaptation**:

1. Rahman et al. (2025)
   [Reference 1]
   Justification: This paper offers valuable comparative insights into national-level food security challenges and adaptive responses to climate stress, which would help

contextualize the authors' discussion on Pacific Island vulnerabilities.

2. Nawaz et al. (2025a)
[Reference 2]
Justification: This article highlights innovative biological approaches for sustainable agriculture that could be considered for donor strategies aimed at enhancing soil fertility and self-reliant farming systems in Melanesia.
3. Nawaz et al. (2025b)
[Reference 3]
Justification: This work directly relates to the manuscript's emphasis on climate vulnerability and could substantiate discussions on the need for adaptive donor support in the face of changing climatic conditions.

Incorporating these references would enrich the manuscript's theoretical and scientific foundation, as well as provide readers with a broader, cross-regional perspective on food security and climate adaptation strategies.

Overall, this is a rigorous and insightful article that makes a valuable contribution to ongoing discussions on development aid, food security, and geopolitical dynamics in the Pacific region. With minor revisions particularly to improve clarity, define key terms more precisely, and incorporate the above recent works the manuscript will be well-positioned for indexing.

References

1. Rahman T, Shah S, Hassan S, Fahad S: Food security challenges and adaptation strategies in china amidst global climate change. *Journal of Umm Al-Qura University for Applied Sciences*. 2025. Publisher Full Text
2. Nawaz T, Fahad S, Gu L, Xu L, et al.: Harnessing Nitrogen-Fixing Cyanobacteria for Sustainable Agriculture: Opportunities, Challenges, and Implications for Food Security. *Nitrogen*. 2025; **6** (1). Publisher Full Text
3. Nawaz T, Nelson D, Fahad S, Saud S, et al.: Impact of elevated CO2 and temperature on overall agricultural productivity. 2025. 163-202 Publisher Full Text

Is the work clearly and accurately presented and does it engage with the current literature?
Yes

Is the study design appropriate and is the work technically sound?
Yes

Are sufficient details of methods and analysis provided to allow replication by others?
Yes

Are all the source data and materials underlying the results available?
Yes

If applicable, is the statistical analysis and its interpretation appropriate?
Yes

Are the conclusions drawn adequately supported by the results?
Yes

Competing Interests: No competing interests were disclosed.

Reviewer Expertise: Climate Change and Food Security, Agriculture, Molecular Biology

I confirm that I have read this submission and believe that I have an appropriate level of expertise to confirm that it is of an acceptable scientific standard, however I have significant reservations, as outlined above.

Reviewer Report 29 January 2025

https://doi.org/10.21956/openreseurope.19150.r47087

© 2025 Wakweya R. This is an open access peer review report distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

?

Rusha Begna Wakweya
Policy and Socioeconomics, Ethiopian Forestry Development, Jimma center, Jimma, Oromia region of Ethiopia, Ethiopia

Towards 'retro liberalism' or food security? Donor development aid to the agricultural sectors of four Melanesian states, 2008-2021.

-The paper critiques the donor focus on niche agricultural products aimed at global markets rather than addressing broader food security and local agricultural resilience. It is well written and informative with a strong observation. However, I have some minor comments that need to be addressed before it will be accepted for publication. I believe that the document could offer more actionable policy recommendations or alternative models that donors could adopt to enhance food security directly.

- The Figures and tables are detailed, but some may lack context or are overly complex for non-specialist readers. Simplifying visuals or providing a summary interpretation for key figures could improve accessibility.
- The paper implies that there is donor Bias and Geopolitical Implications. It touches on donor motivations, such as geopolitical strategy (e.g., China's Belt and Road Initiative vs. Australia's regional security concerns). Expanding on how these motivations impact aid efficiency or align with recipient country needs could deepen the analysis.
- Discussion on Aid Dependency Insufficient. While aid dependency is acknowledged, the document could delve deeper into long-term implications for economic and political sovereignty in Melanesian states. It would be better if the authors support it with recent evidences on donor aid dependency.
- There is limited Engagement with Local Voices. The analysis seems heavily donor-centric. Incorporating perspectives from local governments, farmers, and other stakeholders might provide a more balanced view of how aid impacts agriculture and food security on the ground.
- The use of GDP and other metrics is insightful, but there is limited exploration of alternative indicators (e.g., GINI index for inequality or Human Development Index trends) that might

provide a broader socio-economic context.
- While the narrow focus allows for detailed analysis, it may overlook regional dynamics or lessons from other Pacific Island nations. A comparative analysis could enrich the findings.
- While climate change is mentioned as a challenge, there is little detailed discussion on how agricultural aid is adapting to this crisis. Are there successful models or innovations that could be highlighted?
- The conclusions critique "retro liberalism" in donor aid but provide limited direct policy recommendations or pathways for transforming agricultural aid toward food security goals.

Detailed Suggestions for Improvement
- Provide a table summarizing policy recommendations.
- Include case studies from recipient farmers or success stories.
- Analyse how donor strategies align with or contradict recipient nations' stated goals.
- Collaborate with local researchers for a more grassroots perspective.

Is the work clearly and accurately presented and does it engage with the current literature?
Yes

Is the study design appropriate and is the work technically sound?
Yes

Are sufficient details of methods and analysis provided to allow replication by others?
Yes

Are all the source data and materials underlying the results available?
Yes

If applicable, is the statistical analysis and its interpretation appropriate?
Yes

Are the conclusions drawn adequately supported by the results?
Yes

Competing Interests: No competing interests were disclosed.

Reviewer Expertise: Rural Development, Agricultural Extension,Socioeconomics,Climate smart agriculture,Agricultural extension technologies

I confirm that I have read this submission and believe that I have an appropriate level of expertise to confirm that it is of an acceptable scientific standard, however I have significant reservations, as outlined above.